RESEARCH PLAN PROPOSAL

EFFECT OF CYBERSECURITY ON FINANCIAL INCLUSION UNDER DIGITAL PAYMENT SYSTEM IN INDIA

For registration to the degree of

Doctor of Philosophy

IN THE FACULTY OF COMMERCE & MANAGEMENT

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INTRODUCTION

DIGITAL PAYMENTS.

Digital Payments refers to a way of payment made through digital instruments. In Digital Payments System, there is a payer-payee interface, both use electronic modes to send and receive money. No hard cash is involved in Digital Payment transactions. It is also known as an electronic mode of payment.

According to The Payments and Settlement Act, 2007: Any "electronic funds transfer" means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment.

DIGITAL PAYMENTS IN INDIA.

India's digital payments have expanded about for 10 times since BJP- led government in 2014. The newly established government launched a campaign known as the "Digital India programme" on 1st July 2015 with the objective of connecting rural India with high-speed internet facilities as well as improving digital literacy. Digital Payments in present are yet to dominate India's financial transactions completely, following demonetization. The rise of digital payments was driven mostly by e-wallet players. According to a report by Google and Boston Consulting Group (BCG), the Indian Digital Payments industry is estimated to touch $ 500 billion by 2020, contributing about 15% to the country's GDP.

HISTORY OF DIGITAL PAYMENTS IN INDIA AND WORLD.

In India, the development of its' payments system include the introduction of MICR clearing in the early 1980s, after that Electronic Clearing Service and Electronic Funds Transfer in the 1990s, then issuance of credit and debit cards by banks in the 1990s, the national financial switch in the year 2003, that brought ATMs across the country, the RTGS and NEFT in 2004, the Cheques' system in 2008. Furthermore, non-bank entities introduced the issuance of pre-paid instruments (PPI), including mobile and digital wallets. Some significant initiatives were taken by NPCI by launching CTS, NACH, IMPS, NFS, RUPAY (a domestic card payment network), APBS AND AEPS (Parts of Financial Inclusion process), National USSD Platform, UPI, BHIM Applications. These developments lead to the evolution of the digital payments ecosystem in the country.

Digital payments evolved with the development of the internet in different parts of the world. The first online payment transactions began to operate in the year 1990s. The Stanford Federal Credit Union was the first institution to offer online banking services to customers in 1994, but they were not very user-friendly. Afterward, in the years 1995 and 1996, Millicent and Ecash were the players who offered various services like micropayments systems, e-money tokens or digital cash.

The founder of e-commerce, Amazon in the year 1994 provided further impetus to their early digital payment efforts. Paypal was one of the earliest companies to specialize in online payments. It started an online money transfer service in 1999. By the year 2010, digital payment methods were widespread in many countries.

In 2011, E-payments were launched for individuals and small businesses to provide them an efficient and cost-effective way to pay and receive domestically as well as internationally. In the year 2013, Alipay quietly surpassed Paypal and became the biggest mobile payment solution with approximately $ 150 Billion worth of transactions.

WORLD'S MOST CASHLESS COUNTRIES

According to a report of Government E-Payments Adoption Ranking (GEAR), 2018 the overall rankings and scores for the 73 countries of the world in the study are presented. GEAR is an Economist Intelligence Unit (EIU) global index and benchmarking study commissioned by Visa. The objective of this study is to measure governments' efforts to enable e-payments adoption. The overall score in this study is a weighted sum of category scores (on a 0-100 scale where 100 is the most favorable). 30 Countries score is shown below in the table:-

RANK	COUNTRIES	SCORES
1.	Norway	89.7
2.	France	89.4
3.	Denmark	88.8
4.	Canada	88.6
5.	Australia	88.1
6.	United Kingdom	87.9
7.	South Korea	87.7
8.	Singapore	87.6
9.	Finland	86.2
10.	Sweden	85.8
11.	Netherlands	83.7
12.	United States	83.6
13.	Austria	82.9
14.	Germany	82.1
15.	New Zealand	80.9
16.	Hungary	79.7
17.	Brazil	79.5
18.	Ireland	78.9
19.	Malaysia	78.8
20.	Chile	78.5
21.	Italy	78.2
22.	Japan	77.9
23.	Hong Kong	76.5
24.	Spain	75.8
25.	Taiwan	75.6

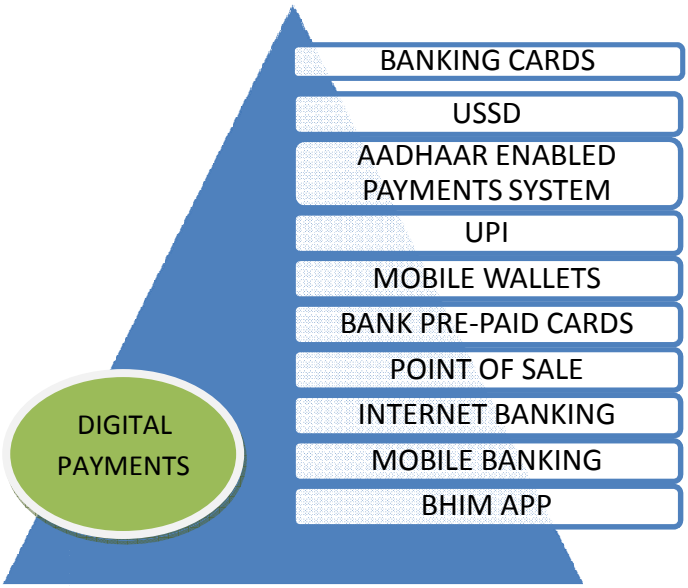
26.	Argentina	74.8
27.	United Arab Emirates	73.5
28.	India	73.3
29.	Colombia	70.8
30.	Russia	70.8

TYPES OF DIGITAL PAYMENTS

Digital Payments is a wider concept, it includes different kinds of payment methods. According to its' system of operations, they are broadly classified as:-

- Centralized Digital Payments

  In the centralized digital payment system, any of the customers can conduct financial transactions with any of the organizations through an initial registration, entry of a unique ID, as well as the required password.



- Decentralized Digital Payments.

In the decentralized digital payment system, multiple parties can collaborate on specific tasks without requiring parties to trust one another.

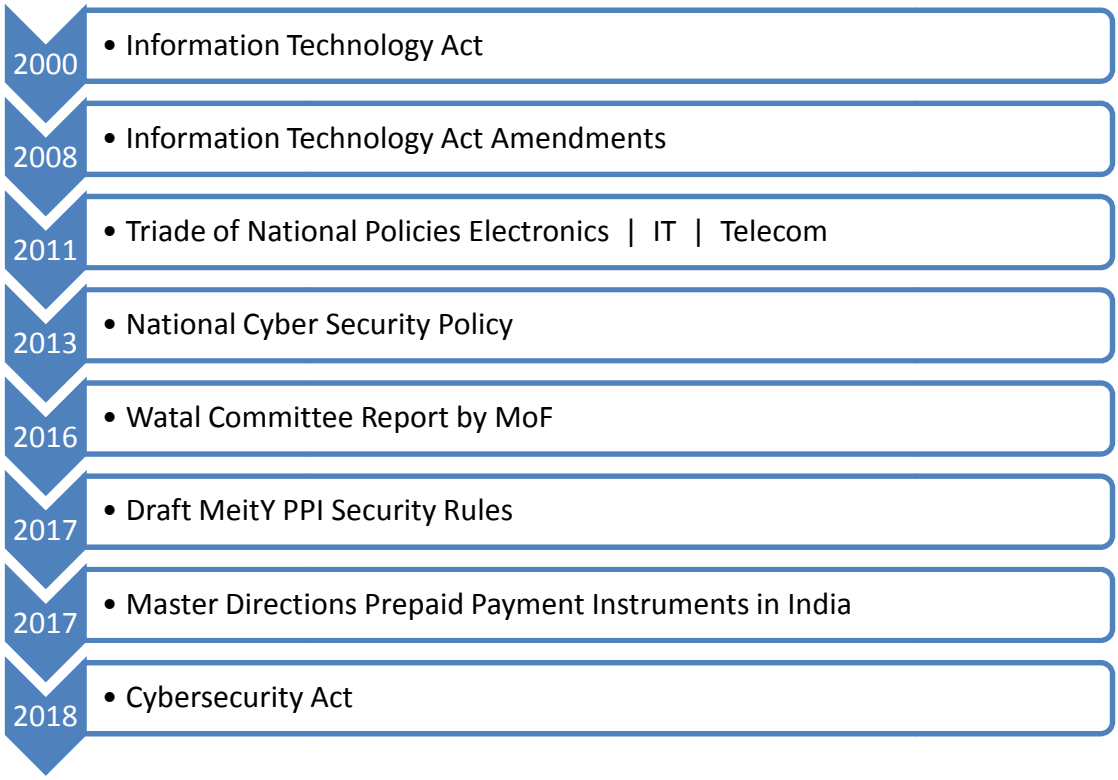
CYBERSECURITY IN DIGITAL PAYMENTS

In today's scenario, trust assurance and security in digital payments architecture have been a mainstream issue in the context of a cashless economy in India. Where a considerable adoption by the users of the Aadhar ecosystem has taken place (following the event of demonetization), as India is very new to the concept of digital payments, consumers are always around the impending threat of cyber attack. While 'trust' on digital payments is the foremost concern for the users, there are many issues faced by merchants.

The allied digital payment issues are a lack of real-time payment reflection in the recipients' bank account, privacy, and various security measures. These issues act as a barrier to adopting digital payments by the general public.

Moreover, understanding consumer behavior and a strong redressal system are a few measures that could help in reducing risks. We must ensure the cybersecurity roadmap must integrate with the global payments chain for our better economic and social development.

INDIA's DIGITAL PAYMENTS CYBERSECURITY JOURNEY



TYPES OF CYBER CRIME IN DIGITAL PAYMENTS

Phishing – It is a fraudulent attempt to obtain sensitive and personal information such as usernames, passwords, login credentials, ATM PIN and credit card numbers. Targets are contacted through email, telephone or text messages by someone posing as a legitimate institution.

Pharming – It is a scamming attempt to manipulate users on the internet. Pharming redirects various users to false websites without them even knowing it.

Internet scams – It is a fraud in which internet services or software are used to defraud victims or to take their advantage. These attacks are created to make the fraud with private assets of the customer directly rather than personal data through various tricks and more.

Malware – It is a malicious software intentionally designed to damage devices, stealing data. Viruses, Trojans, and ransomware are some kinds of different types of malware.

Identity theft – It is a deliberate intention in which someone's identity is used to gain a financial advantage or obtaining credit and other benefits.

Investment or share sale (boiler room) fraud – It is also known as securities fraud or stock fraud. It is a deceptive practice in the stock market that induces investors to make purchase or sale decisions on the basis of false information.

Lottery fraud - In this type of fraud, the attacker sends fake letters or e-mail messages, which recommend the user that he has won a lottery. Users are asked to respond to email messages with some private banking information of the victim, it includes his bank account details and personal information.

Keystroke capturing/logging – It is a type of surveillance software, once installed on a system, has the capability to record every keystroke made on this system. This attack mainly takes place at internet cafes.

SECURITY CHALLENGES FOR DIGITAL TRANSACTIONS

- Insecure Public wifi
- Lost, Stolen or Resold mobile Devices
- Malicious third-party applications
- Awareness of security issues
- Malicious access to a session token
- Interception of OTA Transmission

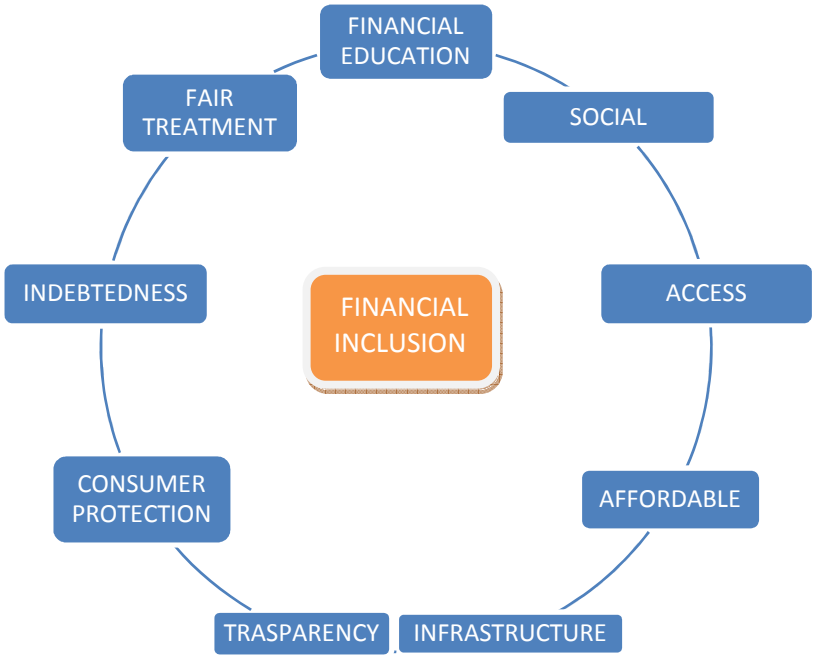
FINANCIAL INCLUSION

- Financial Inclusion is the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream institutional players.

  -Reserve Bank of India.

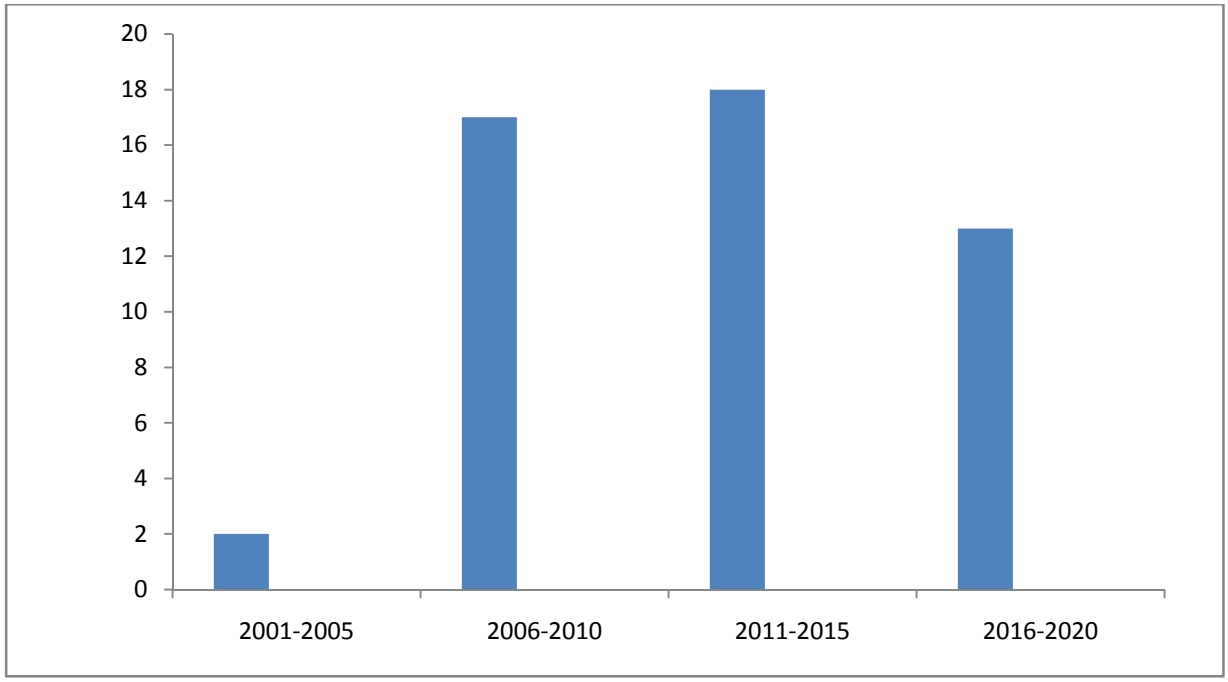
- It is a pursuit where financial services are affordable and accessible to all individuals and businesses, regardless of net worth and size. Its' fundamental objective is to reduce poverty and income inequality. Financial Inclusion has multiple dimensions, such as reflecting the variety of financial services, from payments and savings accounts to credit, insurance, pensions, securities markets, and various other financial products and services.

DIMENSIONS OF FINANCIAL INCLUSION



Financial Inclusion is one of the main agendas in a developing nation. Financial Exclusion is so pervasive that the focus of the country's economy is to improve access to financial services. So, to assure the quality of different dimensions of Financial Inclusion is a great challenge faced by the economies. Quality of dimensions of Financial Inclusion depends upon various factors such as consumer awareness, cost of services, transparency, and competition in the market as well as consumer acceptance and trust.

Research Articles by year of publication



CITATION ANALYSIS

Citations refer that someone has referenced the work of another author (s). The citation analysis means studying cited references for a population of articles to find the most influential works in the field. In this section, we examined the cited references of the Impact on Digital Payments on Financial Inclusion articles to observe the quality of the articles and to find out the most important articles of the research stream. We have used the citation information provided by Google Scholar and Research Gate for the purpose of citation analysis. It has found that some of the articles are least cited the One possible reason can be that most of the articles were recently published during the period of 2016 and 2019. The 30 articles have cited references. The most-cited article is Exploring Consumer Adoption Of Mobile Payments - A Qualitative Study with 787 cited references and the least one is Digital Payments: Challenges and Solutions which is being thrice cited, and rest of articles details are shown below:-

Article title	Citations
Exploring Consumer Adoption of Mobile Payments - A Qualitative Study	787
Understanding consumer acceptance of mobile payment services: An empirical analysis	778
Past, Present and Future of Mobile Payments Research: A Literature Review	688
Mobile money: the economics of m-pesa	471
An empirical study of customers' perceptions of security and trust in e-payment systems	452
Predicting young consumers' take-up of mobile banking services	448
Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India	239
Poor people using mobile financial services: observations on customer usage and impact from m-pesa	188
Cyber Security Challenges in Smart Cities: Safety, security, and privacy	158
The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya	154
An empirical analysis of surcharging card payments and payment behaviour in the netherlands	134
An extension of TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece	128
Analysis of E-Commerce and M-Commerce: Advantages, Limitations, and Security issues	125
Mobile money: communication, consumption, and change in the payments space	124
Mobile Money Transfer Services: The Next Phase in the Evolution in Person-to-Person Payments	108
Using e-cash in the new economy: an economic analysis of micropayment systems	102
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Competition and challenges of mobile banking: a systematic review of major bank models in the thai banking industry	**32**
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Mobile financial services and financial inclusion: is it a boon for savings mobilization?	**31**
The digital revolution in financial inclusion: international development in the fintech era	**30**
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Mobile telephony, financial inclusion, and inclusive growth	**19**
Mobile money: implications for emerging markets	**18**
Mobile remittances: design for financial inclusion	**14**
Digital payment and its discontents: street shops and the indian government's push for cashless transactions	**13**
A Digital Pathway to Financial Inclusion	**12**
A Survey of System Platforms for Mobile Payment	**7**
Digital payments system and rural India: A review of the transaction to cashless economy	**6**
Impact of Digital Finance on Financial Inclusion and Stability	**4**
Digital Payments: Challenges and Solutions	**3**
A study on secured cashless economy in india with reference to initiatives taken by reserve bank of india (rbi) towards digital payment	**-**

REVIEW OF LITERATURE

A Literature Review is a critical analysis of published data and information through reviewing, summarizing, classifying and comparing the prior research articles. It tells what the research is about, how it is carried out and also identifies the research gap. The purpose of the review of literature is to find out what information already exists on a topic in an area of research. It also identifies various methodologies, techniques, ideas, and theories that have been used in prior research articles.

OBJECTIVES OF REVIEW OF LITERATURE

- To synthesize the existing literature on the Impact of Digital Payments or Mobile Payments on Financial Inclusion;
- To arrange the publication in an orderly manner to enable easy and quick search;
- To classify research articles according to their approach and methodologies; and
- To suggest a research agenda for future work.

The Report is organized in the following segments:-

- Introduction about the Impact of Digital Payments on Financial Inclusion.
- Classification scheme of paper reviewed.
- Main findings.
- Research gap and Scope for further research.

REVIEWED ARTICLE 1

Srihari Kulkarni, Abdul Shahanaz Taj. (2019). Digital Payments: Challenges and Solutions: IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668 PP 50-55

OBJECTIVES - The focus of this paper is to identify and explain the different methods of digital payment, we analyze the challenges of digital payments from a different perspective and provide preliminary security countermeasures for each of the issues.

COUNTRY - India
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – Despite the benefits of digital finance, this article has highlighted some challenges that digital finance poses for financial inclusion and financial stability. Finally, an interesting direction for future research would be to explore the relationship between digital finance and economic crises to determine whether digital finance helps to propagate financial contagion during a crisis.

REVIEWED ARTICLE 2

Ozil, Peterson. (2018). Impact of Digital Finance on Financial Inclusion and Stability: Borsa Istanbul Review, 18, 329-340.

OBJECTIVES - This study examines the impact of digital finance for financial inclusion and financial system stability.

COUNTRY - Developing and emerging economies.
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – Despite the benefits of digital finance, this article has highlighted some challenges that digital finance poses for financial inclusion and financial stability. Finally, an interesting direction for future research would be to explore the relationship between digital finance and economic crises to determine whether digital finance helps to propagate financial contagion during a crisis.

REVIEWED ARTICLE 3

Amidu, Mohammed. , Haruna, Issahaku. (2018). Mobile Telephony, Financial Inclusion, and Inclusive Growth: Journal of African Business, 1-24.

OBJECTIVES - The paper employs the multipurpose nature of mobile telephony to investigate its welfare implications using a large sample of households in Ghana. To test for two related issues: First, To investigate whether mobile telephony promotes poor people development by helping households to e□ciently allocate consumption and navigate out of poverty. Second, To analyze whether access to a broad array of financial services enhances the capacity of households to live worthwhile lives.

COUNTRY - Ghana
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD - Empirical Analysis

FINDINGS - The study established that mobile technology and financial inclusion had reduced poverty and increased household consumption per capita in the female-headed household and rural samples but they are yet to be harnessed to bridge the development gap in gender and locality. This study does not cover all the dimensions of financial inclusion. Thus, future research can employ other financial inclusion measures/dimensions to reassess the robustness of the link between mobile telephony and financial inclusion.

REVIEWED ARTICLE 4

Pal, Joyojeet. , Chandra, Priyank. , Kameswaran, Vaishnav. , Parameshwar, Aakanksha. , Joshi, Sneha. , Johri, Aditya. (2018). Digital Payment and Its Discontents: Street Shops and the Indian Government's Push for Cashless Transactions: CHI Conference. 1-13.

OBJECTIVES - The main aim of the study is to examine discussions of technology adoption within a developmental political discourse and to explore the tensions between imposing formality in exchanges and prevalent market practices, and also to examine the practical challenges with technology adoption for people who are relatively new to digital environments.

COUNTRY - India
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Exploratory and Descriptive Analysis

FINDINGS – The results are as follows: 1. The shopkeepers' was to maintain the status quo in the short-term by using resources and networks to minimize cash shortages and continue business as usual instead of adopting digital transactions. 2. Respondents portray demonetization as both modern and righteous as a notion for a larger collective, but as detrimental to themselves as individual agents. 3. We find that digital cash adoption on an individual level relates to awareness both on the personal and collective front.

REVIEWED ARTICLE 5

Alfred Ouma, Shem. , Maureen Odongo, Teresa. , Were, Maureen. (2017). Mobile financial services and financial inclusion: Is it a boon for savings mobilization? : Review of Development Finance, 7, 29-35.

OBJECTIVES - This study sought to establish the linkage by examining whether the pervasive use of mobile telephony to provide financial services is a boon for savings mobilization in selected countries in sub-Saharan Africa.

COUNTRY -	African countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Descriptive and Empirical analysis

FINDINGS – The Descriptive analysis shows that Usage of mobile financial services is skewed towards savings. The empirical results based on Kenya provide evidence regarding the impact of mobile financial services on savings. Besides enhancing the likelihood of saving, the amounts saved are also being increased. The accessibility, convenience, affordability and the safety associated with mobile financial services is a major catalyst in the expansion and growth of mobile financial services.

REVIEWED ARTICLE 6

Kumar, D. H., B M, N., & M, R. (2017). A STUDY ON SECURED CASHLESS ECONOMY IN INDIA WITH REFERENCE TO INITIATIVES TAKEN BY RESERVE BANK OF INDIA (RBI) TOWARDS DIGITAL PAYMENT. EPRA International Journal of Economic and Business Review, 21-27.

OBJECTIVES - The main objective of this study is to analyze the various risk involved in digital payments and to understand the initiatives undertaken by RBI.

COUNTRY -	India
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Exploratory Analysis

FINDINGS – The study suggests more initiatives have to be intended in creating awareness and thereby educating people followed by its implementation to realize the intended benefits of a ‘Cashless Economy

REVIEWED ARTICLE 7

C.S, Ravi. (2017) Digital payments system and rural India: A review of the transaction to cashless economy: International Journal of Commerce and Management Research, 3(5), 169-173.

OBJECTIVES - The objective of this research paper is to study the positive impact that Digitization of the payment system in the Indian economy will have on the development of the Rural Indian Sector.

COUNTRY -	India
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Descriptive Analysis

FINDINGS – The Indian economy will digitalize in rural areas through mobile-based payments that are faster and cheaper to roll out. It is a matter of increasing awareness in rural areas. Improved solutions in terms of UPIs, mobile wallets, and digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and support in improved conditions of digital payments processing in rural sectors.

REVIEWED ARTICLE 8

Gupta, Ravi & Kumar, R. & Bharadwaj, Anuj. (2017). Mobile Banking System in India: Practices, Challenges and Security Issues. International Journal of Computer Trends and Technology. 43. 24-48. 10.14445/22312803/IJCTT-V43P106.

OBJECTIVES - The study is aimed to evaluate the perceptions and opinions of urban mobile banking users.

COUNTRY -	India
DATA COLLECTED-	Primary data
DATA ANALYSIS METHOD -	Cross-sectional descriptive design

FINDINGS - Study shows 'mobile handset operability', 'privacy and security', Standardization, Issues of 'download & installation of application are some of the major issues in mobile banking.

REVIEWED ARTICLE 9

Humbani, Michael. , Wiese, Melanie. (2017). A Cashless Society for All: Determining Consumers' Readiness to Adopt Mobile Payment Services: Journal of African Business, 19(3), 409-429.

OBJECTIVES – This research is an effort to provide insights on how to increase adoption and reduce the gender gap in mobile payment services through regression analysis.

COUNTRY -	South Africa
DATA COLLECTED-	Primary Data
DATA ANALYSIS METHOD-	Descriptive Analysis

FINDINGS - There is a need to create a trustworthy brand for service providers before offering mobile payment services, the focus should be on promoting mobile payments in areas characterized by a large consumer base such as the retail and public transportation and adequate investment should be made in infrastructure and effective promotion of mobile payments.

REVIEWED ARTICLE 10

Gabor, Daniela & Heather. , Brooks, Sally. (2016). The digital revolution in financial inclusion: international development in the fintech era: New Political Economy.

OBJECTIVES - This paper examines the growing importance of digital-based financial inclusion as a form of organizing development interventions through networks of state institutions, international development organizations, philanthropic investment, and fintech companies.

COUNTRY - Various Countries
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD - Empirical Analysis

FINDINGS –This article has highlighted how the normalization of the subprime 'moment' as 'business as usual' worldwide is being facilitated via a global program of market-based financial development. Contestation to such a well-resourced program of incorporation would be limited. Further empirical research is needed to explore in more depth the processes of financial governance and the impossibility of emergent forms of resistance which make an effort to induce new populations to Conform to the 'ethos of commodity calculation'.

REVIEWED ARTICLE 11

Suri, Tavneet. , Jack, William. (2016). The long-run poverty and gender impacts of mobile money: Journal of Science, 354(6317), 1288-1292.

OBJECTIVES - The aim of this paper is to estimate that access to the Kenyan mobile money system M-PESA increased per capita consumption levels and lifted Kenyan households out of poverty.

COUNTRY- Kenya
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD - Descriptive Research

FINDINGS – The result is being observed that No evidence has been found that mobile money has increased the overall safety and convenience of households' store of value. The results suggest that having a private, low-cost means of managing financial resources is necessary. Although mobile phone use correlates well with economic development, mobile money causes it.

REVIEWED ARTICLE 12

De. Sena. Abraham, Ricardo. , Moriguchi, Stella. , Andrade, Darly. (2016). The intention of adoption of mobile payment: An analysis in the light of the Unified Theory of Acceptance and Use of Technology (UTAUT): RAI Revista de Administracao e Inovacao, 13, 221-230.

OBJECTIVES - This article aims to evaluate the intention of adopting a future mobile payment service from the perspective of current Brazilian consumers of mobile phones, based on the Unified Theory of Acceptance and Use of Technology (UTAUT).

COUNTRY - Brazil
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Descriptive Analysis

FINDINGS – This paper provides information to the business sectors involved to assess the reaction of the market before a possible launch of the referred service and allows them to build their respective strategies of segmentation and communication, from the understanding of the factors that precede intention of adoption.

REVIEWED ARTICLE 13

Mukhopadhyay, Bappaditya. (2016). Understanding cashless payments in India: Financial Innovation, 2, 2-26.

OBJECTIVES - This paper analyzes India's gradual transition towards a cashless economy.

COUNTRY - India
DATA COLLECTED- Secondary Data (survey data is being used)
DATA ANALYSIS METHOD-. Empirical research

FINDINGS – This paper reveals that the most crucial enabler of cashless payments is inflows of funds into the accounts. Some of the key estimates are:

1.) A significantly higher proportion of individuals make cashless payments now (12.61% in 2014 as compared to 3.47% in 2011) 2.)The number and the monetary value of cashless transactions have a CAGR of 19.91% and 24.14%. 3.) Most growth in cashless payments has been through mobile payments. We also found that as more payments are directly credited to the account, cashless payments increase significantly.

REVIEWED ARTICLE 14

Dennehy, Denis. , Sammon, David. (2015). Trends in mobile payments research: A literature review: Journal of Innovation Management, 1-14.

OBJECTIVES– This paper presents the findings of a review of literature aimed at identifying the key research themes and methodologies researched. In order to uncover these trends, the authors reviewed the top twenty cited papers since 1999 and the twenty most recently published papers on m-payments since August 2014.

COUNTRY -	Various countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD -	Empirical Analysis

FINDINGS - The study of m-payment systems can no longer be considered a fad or fashion, but an established research domain that will continue to receive increased attention from researchers from diverse disciplines in the coming years. So, stakeholders who are engaged in the design and delivery of m-payment systems will realize the potential of m-payment systems and the universal adoption of such systems will become the reality.

REVIEWED ARTICLE 15

Kaur, Harpreet. , Nain. Singh, Kawal. (2015). Pradhan Mantri Jan Dhan Yojana (Pmjdy): A Leap towards Financial Inclusion in India: International Journal of Emerging Research in Management &Technology, 4(1), 25-29.

OBJECTIVES - The present paper endeavors to examine the progress of Financial Inclusion Initiatives in India and to study the changing trends in financial inclusion with special reference to Pradhan Mantri Jan Dhan Yojana.

COUNTRY -	India
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Exploratory Analysis

FINDINGS – This paper reveals that Financial inclusion broadens the resource base of the financial system by developing a culture of savings among a large segment of the rural population and plays its own role in the process of economic development. Financial inclusion also mitigates the exploitation of vulnerable sections by the usurious money lenders by facilitating easy access to formal credit.

REVIEWED ARTICLE 16

Reaves, Bradley. , Scaife, Nolen. , Bates, Adam. , Traynor, Patrick. , Butler, Kevin, R.B.(2015). Mobile Money, Mobile Problems: Analysis of Branchless Banking Applications in the Developing World: ACM Transactions on Privacy and Security.

OBJECTIVES –. The main aim of the study is to evaluate the claims on applications that are not subject to the traditional regulations applied in the financial sector. The first in-depth measurement analysis of branchless banking applications was performed of all 46 known Android mobile money apps across the 246 known mobile money providers and demonstrate that automated analysis fails to provide reliable insights.

COUNTRY -	Various Countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD -	Analytical Analysis

FINDINGS - This paper reveals that there are significant vulnerabilities in six of the seven applications, which prevent both users and providers from reasoning about the integrity of transactions. Dramatic improvements to the security of branchless banking applications are imperative to protect the mission of these systems.

REVIEWED ARTICLE 17

Bayero, Musa. Abdullahi. (2015). Effects of Cashless Economy Policy on Financial Inclusion in Nigeria: An Exploratory Study: Procedia - Social and Behavioral Sciences, 172, 49 – 56.

OBJECTIVE – The objective is to conduct empirical research regarding the relationship between the Cashless economic policy and financial inclusion in Kano, Nigeria.

COUNTRY-	Nigeria
DATA COLLECTED-	Primary Data
DATA ANALYSIS METHOD -	Empirical Analysis

FINDINGS - The result is that Infrastructure has the highest contribution in the model followed by customer value and awareness. The results show that awareness, customer value, and infrastructure have a significant statistical association with the financial inclusion of working-age adults. On the contrary, change in business models of financial service providers is found to have an insignificant relationship with financial inclusion.

REVIEWED ARTICLE 18

Jack, William. , Suri, Tavneet. (2014). Competition and Challenges of Mobile Bankings: A Systematic Review of Major Bank Models in the Thai Banking Industry: Journal of High Technology Management Research, 25, 123–131.

OBJECTIVES - This study investigates the competition and challenges of the mobile banking system in Thailand. The empirical study focuses on the leading banks in Thailand: Bangkok Bank, Kasikorn Bank, Siam Commercial Bank, Krung Thai Bank and Bank of Ayudhya. It also discusses the strategies, SWOT analyses of the mobile banking industry in the move towards the mobile money economy.

COUNTRY - Thailand
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – The results provide insightful implications on future challenges and increasing competition under 3G and 4G mobile phone networks whereby the e-payment market will get bigger when Thailand would enter the ASEAN Economic Community (AEC — upcoming regional competition in AEC countries) in 2015.

REVIEWED ARTICLE 19

S. Etim, Alice. (2014) Mobile banking and mobile money adoption for financial inclusion: Research in Business and Economics Journal, 1-13.

OBJECTIVES - This paper provides insight into the lack of mobile money adoption in West Africa through an information and communication technology (ICT) study in Nigeria, the largest country in West Africa.

COUNTRY - Nigeria
DATA COLLECTED- Primary Data (survey and interviews)
DATA ANALYSIS METHOD-. Exploratory and Descriptive Analysis

FINDINGS – About 67 % used prepaid SIM cards with their mobile phones and 29 % indicated that in addition to their use of mobile phones/ prepaid SIM cards, they also use public paid phones. The results for the ease of using a mobile phone for other tasks were different. 33 % said it was extremely difficult, 13.5 % indicated that it was quite difficult. Respondents facing some level of difficulty in using mobile phone for class-related work, therefore, stood at 46.5 % and those who found it easy to use mobile phones for class assignments was 27.7 %.

REVIEWED ARTICLE 20

De Albuquerque, Joao. , Diniz, Eduardo. , Cernev, Adrian. (2014). Mobile payments: a scoping study of the literature and issues for future research: Information Development, 1-27.

OBJECTIVES - This paper seeks to fill the knowledge gap by providing a comprehensive scoping study, which seeks to map out the literature published between 2001 and 2011 and to show how future research can make improvements in the field.

COUNTRY -	Different countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD -	Empirical Analysis

FINDINGS – There is a scope of future research. Money, as we know it today, will soon be largely handled by electronic devices. Moreover, this trend should be welcomed for the sake of social and economic development and to benefit a large section of the public.

REVIEWED ARTICLE 21

Thakur, Rakhi & Srivastava, Mala. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. Internet Research: Electronic Networking Applications and Policy. 24. 10.1108/IntR-12-2012-0244.

OBJECTIVES - The purpose of this paper is to accomplish two objectives – to test the functional relationship between adoption readiness (AR), perceived risk (PR) and usage intention for mobile payments in India and to investigate the stability of proposed structural relationships across different customer groups.

COUNTRY -	India
DATA COLLECTED-	Primary data
DATA ANALYSIS METHOD -	Empirical analysis

FINDINGS - On appraising the proposed model, five out of six hypotheses were fully supported while one hypothesis was partially supported. Test of invariance showed significant variance among users and non-users.

REVIEWED ARTICLE 22

Elmaghraby, Adel & Losavio, Michael. (2014). Cyber Security Challenges in Smart Cities: Safety, security, and privacy. Journal of Advanced Research. 5. 10.1016/j.jare.2014.02.006.

OBJECTIVES - The main objective of the study is to examine two important and entangled challenges: security and privacy. Security includes illegal access to information and attacks causing physical disruptions in service availability.

COUNTRY - United States
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Analytical Analysis

FINDINGS – Matching the daunting security vulnerabilities Smart City systems may present in the hands of unwitting users is the absence of a clear theory of law and rights to define what can and should be done with the power these systems represent.

REVIEWED ARTICLE 23

M, N., Kavyashree, N., Jagannath, S., & Chahar, D. (2013). Analysis of E-Commerce and M-Commerce: Advantages, Limitations, and Security issues. International Journal of Advanced Research in Computer and Communication Engineering, 2360-2370.

OBJECTIVES – 1).To study the Overview of E-commerce and M-commerce.2). Understand the relationship between m-commerce and e-commerce.3). Discuss the current advantages and disadvantages of E-commerce and M-commerce. 4). Analysis of Global e-commerce sales 5). Analyze of Current Internet Retail Sales by Region: 2005-2015.6). Identify the M-Commerce Applications. 7). Discuss M-commerce versus E-commerce. 8). Study of Security Issues in Online marketing.

COUNTRY - India
DATA COLLECTED- Secondary data
DATA ANALYSIS METHOD - Comparative analysis

FINDINGS - Day by day E-commerce and M-commerce playing a very good role in online retail marketing and peoples using this technology day by day increasing all over the world.

REVIEWED ARTICLE 24

MAURER, BILL.(2012). Mobile Money: Communication, Consumption, and Change in the Payments Space: Journal of Development Studies, 48(5), 589–604.

OBJECTIVES – This article explores: 1. The emerging field of mobile phone-enabled systems for value transfer and storage, primarily in the developing world, to broaden financial inclusion and bank the 'unbanked. 2. How economic techniques and social narratives about markets and opportunities for profit and financial inclusion in the 'payments space' – format a consumer market for mobile money. 3. Mobile money as a new means of exchange or store of value.

COUNTRY- Developing Countries
DATA COLLECTED - Secondary Data
DATA ANALYSIS METHOD - Exploratory Analysis

FINDINGS - This article has suggested a paradigm for promoting global savings that is itself the iterative response to developments 'on the ground' and in the globally dispersed network that now makes up the mobile money space. With mobile money, people are potentially setting in motion new media of exchange, methods of payment and stores of wealth and possible measures of value. For the 'producer' of airtime as currency – the person who purchases airtime minutes from a vendor, with the intention of transmitting them to another as money – airtime can function as both exchange and use: it is a potential currency, and it is potential time.

REVIEWED ARTICLE 25

Apostolos N. Giovanis, Spyridon Binioris, George Polychronopoulos, (2012), "An extension of TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece", EuroMed Journal of Business, Vol. 7 Iss: 1 pp. 24 – 53

OBJECTIVES - This paper presents an extended technology acceptance model (TAM) with concepts from the innovation diffusion theory (IDT) and customers' perceived risk, aiming to examine the factors affecting Greek customers' intentions to adopt internet banking services. Furthermore, several individual differences are examined, with respect to their impact on the formation of customers' attitudes about the pros and cons of the new technology.

COUNTRY -	Greece
DATA COLLECTED-	Primary data
DATA ANALYSIS METHOD -	Empirical analysis

FINDINGS - The results indicated that service compatibility is the key factor, which mostly shapes customers' behavioral intentions toward internet banking adoption, followed by TAM constructs and perceived risk elements.

REVIEWED ARTICLE 26

Gabor, Daniela. , Brooks, Sally. (2012). A Digital Pathway to Financial Inclusion: SSRN Electronic Journal, 1-17.

OBJECTIVES – This paper focuses that the commercial assets required to navigate the pathway to an inclusive digital economy vary across the four stages of market development. So, Financial regulations and business models must, therefore, be calibrated to harness those assets at each stage.

COUNTRY -	Developing Countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD -	Empirical Analysis

FINDINGS – This paper reveals that Mobile operators will have to convert their closed APIs into open platforms that make it easier for application providers to integrate with their payment systems. And policymakers are unlikely to see material gains in digital financial inclusion if they cling to regulatory models which fail to distinguish between the risks posed by payments from those posed by financial intermediation. The digital pathway to financial inclusion will indeed be carved by those willing to revisit long-held assumptions in financial services regulation, telecommunications, and banking.

REVIEWED ARTICLE 27

A. K. Jain and D. Shanbhag, (2012) "Addressing Security and Privacy Risks in Mobile Applications," in IT Professional, vol. 14, no. 5, pp. 28-33

OBJECTIVES - Assessment of security risks in mobile applications

COUNTRY - India
DATA COLLECTED- Secondary data
DATA ANALYSIS METHOD - Empirical analysis

FINDINGS - All applications must undergo a thorough security assessment10,11 before being released into production to confirm that attack surfaces discovered during threat modeling have been addressed. A security assessment can also expose security gaps between project designs and approved corporate policies, which might have evolved during development, or problems resulting from the integration of different modules.

REVIEWED ARTICLE 28

Jack, William. , Suri, Tavneet. (2011). Mobile Money: The Economics of M-PESA: National Bureau of Economics Research, 1-30.

OBJECTIVES - The main aim of the study is to conduct two rounds of a large survey of households based on various socioeconomic characteristics for which the technology is used in Kenya and to summarize the mechanics of M-PESA, and review its potential economic impacts. To report findings from a survey of M-PESA agents, who provide cash in and cashout services, and highlight the inventory management problems they face.

COUNTRY - Kenya
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Statistical Analysis

FINDINGS – This paper provides a description of the service and a review of the potential economic effects primarily at the household level, but also in terms of macroeconomic and monetary aggregates. It then provides a detailed portrayal of patterns of use across urban and rural populations, using data from the first large household survey focused on money transfer services in Kenya.

REVIEWED ARTICLE 29

Kumar, Deepti & Martin, David & O'Neill, Jacki. (2011). The times they are a-changing': Mobile payments in India: Proceedings of the International Conference on Human Factors in Computing Systems.

OBJECTIVES – The main aim of the study is to report on an ethnographic study of payment and banking practices in India and to inform on the development of interface elements, applications, and services that would support the needs which are uncovered in the article.

COUNTRY - India
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD - Empirical analysis

FINDINGS- As m-payments develop we are bound to see unexpected innovations and changing practices but balancing creativity while looking at how they might work in reference to today's practices seems a good place to start.

REVIEWED ARTICLE 30

Diniz, Eduardo. , De Albuquerque, Joao. , Cernev, Adrian. (2011). Mobile Money and Payment: A Literature Review Based on Academic and Practitioner - Oriented Publications(2001 - 2011): SSRN Electronic Journal.

OBJECTIVES - The aim of this review is to map out the existing knowledge on mobile money and defining the topics that are most frequently researched and it also examines which locations are most of the studies focused on, and which methodologies are being applied to these studies.

COUNTRY - Different countries
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Analytical Analysis

FINDINGS – By examining peer-reviewed and non-peer-reviewed papers from relevant academic and non-academic sources, the studies are concentrated in a few cases/countries, with emphasis on Kenya and the Philippines, although there are experiences in dozens of other countries.

REVIEWED ARTICLE 31

De. Koker, Louis. , Jentzsch, Nicola. (2011). Financial Inclusion and Financial Integrity: Aligned Incentives: World Development, 1-28.

OBJECTIVES - To analyze preliminary data from FinScope surveys on eight African countries to find that an increase in access to formal services does not automatically imply an immediate and corresponding reduction of usage of formal services.

COUNTRY - African countries
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Analytical Analysis

FINDINGS – This paper reveals that if we see it, from an individual customer's perspective financial inclusion may not be a permanent or all-encompassing state. Current customers may become unbanked and FinScope data shows that a significant group of financially included customers continue to use informal financial services. Lack of trust will be a barrier to financial inclusion. Data protection and privacy should rather be embraced and supported by the FATF (Financial Action Task Force). Financial integrity is also based on the integrity of information. The quality of information, in turn, is ensured by data protection principles. Without effective data protection, citizens may act rationally by withdrawing, at least

in part, into the informal economy, when their government or service providers fail to respect personal privacy.

REVIEWED ARTICLE 32

Ngugi, Benjamin. , Pelowski, Matthew. , Gordon. Ogembo, Javier. (2010). M-Pesa: A Case Study of the Critical Early Adopters' Role in the Rapid Adoption of Mobile Money Banking in Kenya: The Electronic Journal on Information Systems in Developing Countries, 43, 1-16.

OBJECTIVES - This study reviews key factors that led to the phenomenal growth of mobile money banking services in Kenya using M-PESA, “mobile cash money”, the leading mobile money service provider as a case study. The study considers the outstanding challenges experienced by users, possible solutions and future trends.

COUNTRY -	Kenya
DATA COLLECTED-	Primary and Secondary Data
DATA ANALYSIS METHOD-.	Descriptive Analysis

FINDINGS – This paper concluded that M-PESA has revolutionized the way financial services are accessed in Kenya and has a bright future with several value-added services waiting to be tapped. About 47% of the respondents are satisfied with the service as it is. However, the remainder suggested various solutions to address several security and service provision challenges.

REVIEWED ARTICLE 33

Bourreau, Marc. , Verdier, Marianne. (2010). Cooperation for Innovation in Payment Systems: The Case of Mobile Payments: SSRN Electronic Journal, 79, 95-113.

OBJECTIVES -The main aim of this paper is to study the prospects of mobile payments in developed countries, and to analyze the potential business models that could result from the cooperation of banks and mobile network operators.

COUNTRY -	Developed and Developing Countries
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Analytical Analysis

FINDINGS – The five cooperation models for the development of mobile payment solutions are: the light model, the bank-centric model, the mobile-centric model, the partial-integration model, and the full integration model. Though they seem necessary to target the mass market, we argue that the partial- and full-integration models are more costly to implement, in particular, due to the industry cost structure, which involves high fixed costs and low marginal costs. On the other hand, the proliferation of mobile payment solutions with the light model (or with the bank-centric and mobile centric-models) might restrict mobile payments to niche markets.

REVIEWED ARTICLE 34

Alleman, James. , Rappoport, Paul. (2010). Mobile Money: Implications for Emerging Markets: Communications & Strategies, 79, 15-28.

OBJECTIVES – This paper addresses the economics and policy issues of mobile money : - What are the economics of mobile money? What policy issues does it raise? Is it a threat to the traditional banking system? How should it be regulated? What can we learn from the microfinance literature? Do we have empirical evidence of its impact on growth and development?

COUNTRY - Developing countries

DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD - Exploratory Analysis

FINDINGS - We predict a huge market will fuel and accelerate the anticipated explosive growth of m-money based on communications services in emerging markets worldwide. We believe that this hybrid system of mobile devices and microfinance will have a transformative effect on the developing countries economies.

REVIEWED ARTICLE 35

Alampay, Erwin & Bala, Gemma. (2010). Mobile 2.0: M-Money for the BOP in the Philippines: SSRN Electronic Journal, 6(4), 77–92.

OBJECTIVES - This paper explores the reach and use of m-money among the bottom of the pyramid (BoP) in the Philippines using survey data from LIRNEasia's 2008 Mobile 2.0 surveys.

COUNTRY - Philippines
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Exploratory Analysis

FINDINGS – This paper reveals that A large percentage of them have relatives working abroad or in other parts of the country, and based on the LIRNEasia survey, only 13% of the BoP have bank accounts. However, despite the application's obvious relevance to many Filipinos at the BoP, and their knowledge of the financial services offered through mobile phones, only 1% of the BoP have used it for banking services, and only 5% have made payments or received money through this method.

REVIEWED ARTICLE 36

Asadi Tehrani, Maryam. , Asghar Amidian, Ali. , Muhammad, Jafar. , Rabiee, HamidReza. (2010). A Survey of System Platforms for Mobile Payment: International Conference on Management of e-Commerce and e-Government

OBJECTIVES – The main aim of the study is to describe the advantages and disadvantages of the most common mobile payment platforms recorded in the literature and offers a ranking of the technologies considered.

COUNTRY - Iran
DATA COLLECTED- Primary and Secondary Data
DATA ANALYSIS METHOD - Descriptive Analysis

FINDINGS –The results suggest that SIM-based application with binary SMS is the best solution for Iran. It also shows that the importance of each criterion will be different according to the stakeholder involved. Service providers are expected to view the criteria from different perspectives compared to end-users having different priorities.

REVIEWED ARTICLE 37

Merritt, Cynthia. (2010). Mobile Money Transfer Services: The Next Phase in the Evolution in Person-to-Person Payments: Journal of Payments Strategy & Systems, 1-32.

OBJECTIVES - This paper reviews developments in mobile money transfers, the emerging ecosystem, and its participants and business models. It also examines the implications of payment systems roaming across geographic borders with their respective legal and regulatory jurisdictions, as well as the emergence of mobile airtime as an alternative currency.

COUNTRY - Developing and Developed countries
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – As domestic and international mobile money transfer services grow more prevalent, discussions on risk management and payment system integrity will be imperative. Dialogue with all industry stakeholders, including regulators and policymakers, is essential to creating an environment in which payments risk issues are clearly understood. In this way, risk-based regulation that is proportionate with the need to encourage innovation and efficiency in retail payments can be best achieved.

REVIEWED ARTICLE 38

Koenig-Lewis, Nicole. , Palmer, Adrian. , Moll, Alexander. (2010). Predicting young consumers' take-up of mobile banking services: The International Journal of Bank Marketing, 28, 410-432.

OBJECTIVES - This paper aims to investigate the barriers to adopting mobile banking services. From a methodological perspective, this study seeks to build on two widely used models for technology adoption, the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT) and to test a model that is better able to predict consumers' intention to use mobile banking.

COUNTRY - Germany
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – The results of the study indicated that compatibility, perceived usefulness, and risk are significant indicators for the adoption of m-banking services. Compatibility not only had a strong direct effect but was also identified as an important antecedent for perceived ease of use, perceived usefulness, and credibility. Trust and credibility are crucial in reducing the overall perceived risk of m-banking.

REVIEWED ARTICLE 39

Mbogo, Marion (2010). The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya: Journal of Language, Technology & Entrepreneurship in Africa, 2(1), 182-203.

OBJECTIVES - This paper aims to investigate the success factors attributable to the use of mobile payments by micro-business operators.

COUNTRY - Kenya
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD-. Descriptive Analysis

FINDINGS – The results show that perceived convenience had an influence on the intention to use mobile payment services. Secondly, perceived support from the mobile payment services provider influences the intention to use. Thirdly, perceived support from the mobile services provider had an impact on the perceived convenience. Fourthly, perceived ease of accessibility had an impact on the intention to use mobile payment services. Majority of the micro-business operators who completed the survey questionnaire strongly agree that the accessibility of the mobile phone payment is easy.

REVIEWED ARTICLE 40

Gerhardt Schierz, Paul. , Schilke, Oliver. , W. Wirtz, Bernd. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis: Electronic Commerce Research and Applications, 9, 209-216.

OBJECTIVES – This research focuses on the factors determining consumers' acceptance of mobile payment services.

COUNTRY - Germany
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD - Empirical Analysis

FINDINGS - In order to consider adopting mobile payment services, people must find them to be reconcilable with their existing behavioral patterns. This is an important finding since perceived compatibility is not a part of the original TAM and thus is often not considered as acceptance by researchers. The same is true for the second factor. An individual's mobility is a key driver of mobile payment acceptance. Mobile payment services are likely to gain insignificance in the future.

REVIEWED ARTICLE 41

Kim, Changsu & Wang, Tao & Shin, Namchul & Kim, Ki-Soo. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. Electronic Commerce Research and Applications. 9. 84-95. 10.1016/j.elerap.2009.04.014.

OBJECTIVES - The principal objective of this research is to empirically examine, from the viewpoint of consumers, the determinants that affect consumers' perceptions of security and trust, as well as the effects of perceived security and perceived trust on the use of EPS.

COUNTRY -	Korea
DATA COLLECTED-	Primary Data
DATA ANALYSIS METHOD-.	Empirical Analysis

FINDINGS – This study found no evidence of a statistically significant relation-ship between the quality of transaction procedures and consumers' perceived security or perceived trust in EPS use.

REVIEWED ARTICLE 42

Morawczynski, Olga. , Pickens, Mark. (2009). Poor People Using Mobile Financial Services: Conservatization on Customer Usage and Impact of M-PESA: CGAP Brief.

OBJECTIVES –The research provides insights into how poor people use M-PESA, its impact on their lives, and some unexpected consequences.

COUNTRY -	Kenya
DATA COLLECTED-	Primary Data
DATA ANALYSIS METHOD -	Empirical Analysis

FINDINGS – This study focuses that Much of the data is not readily available, so there remains agnostic on the question of how likely it is that the M-Pesa success will be replicated elsewhere.

REVIEWED ARTICLE 43

Jack, William. , Suri, Tavneet. (2009). Seeking Fertile Grounds for Mobile Money: GSMA.

OBJECTIVES – In this paper, we seek to understand the environmental dynamics affecting the uptake of mobile money. We demonstrate that, aside from strong strategy and good business models, the impact of financial services in developing countries is dependent on the extent of market penetration and the political environments in which they take root.

COUNTRY - Developing countries
DATA COLLECTED- Secondary Data

DATA ANALYSIS METHOD - Analytical Analysis

FINDINGS - This paper reveals that the global experience with mobile money is patchy: highly successful in Kenya. Quantifying the factors outlined in this paper across a large number of countries would help shed light on the practical uniqueness of the Kenyan situation. Unfortunately, much of the data is not readily available, so we remain agnostic on the question of how likely it is that the M-Pesa success will be. The global experience with mobile money is patchy: highly successful in Kenya replicated elsewhere.

REVIEWED ARTICLE 44

Singh, Supriya. (2009). Mobile Remittances: Design for Financial Inclusion: Design and Global Development, Third International Conference. 515-524.

OBJECTIVES - This paper investigates the design requirements for international mobile remittances in the context of users' money management and control in the household and the family.

COUNTRY- Europe and North America
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Analytical Analysis

FINDINGS – This paper connects the business and technological literature around mobile transfers with the remittance literature, focusing on insights into money management and control. Through scenarios and personas, it emphasizes the importance of placing the user at the center of his or her social and cultural context.

REVIEWED ARTICLE 45

Bolt, Wilko. , Jonker, Nicole. , Van Renselaar, Corry. (2008) An Empirical Analysis of Surcharging Card Payments and Payment Behaviour in the Netherlands: Journal of Banking & Finance. 196.

OBJECTIVES – An empirical analysis of the impact of surcharging on the demand for debit card services, and the effect of removing the no-surcharge rule on card acceptance by retailers and on consumer payment choice.

COUNTRY - Netherlands
DATA COLLECTED- Primary Data
DATA ANALYSIS METHOD - Empirical and Descriptive Analysis

FINDINGS- Results of the study indicate that Removing debit card charges will lead to more debit card payments and reduce the use of cash. Share of debit card payments in the total number of payments in a store will on average increase by 8 % if the retailer decides not to surcharge anymore. Prohibiting the ability to surcharge may also have adverse effects on cost efficiency. It is therefore important that merchant fees for payment transactions (cash and card payments) reflect the true costs. Cost savings by other players in the payment chain should be passed onto consumers and merchants to ensure that.

REVIEWED ARTICLE 46

Mallat, Niina. (2007). Exploring Consumer Adoption of Mobile Payments - A Qualitative Study: The Journal of Strategic Information Systems. 6(44), 413-432.

OBJECTIVES - The purpose of this paper was to explore factors that affect consumer adoption of mobile payments.

COUNTRY - Finland
DATA COLLECTED- Secondary Data (Qualitative data)
DATA ANALYSIS METHOD-. Exploratory research

FINDINGS – This paper reveals that there are many factors that affect the consumer adoption of mobile payments which is summarised in Table-3 in the article. The mobile payments provide specific benefits such as new mobile technology; time and place independent payments, remote and ubiquitous access to payment services, and the possibility to avoid queuing and complement cash payments. The findings also indicate that the use of mobile payments occurs mainly due to the presence of queues, unexpected need for payment, time pressure, and lack of cash or loose change. The most compatible application areas for mobile payments include electronic ticketing, purchases on vending machines, mobile content and services, and small value payments at POS.

REVIEWED ARTICLE 47

Dahlberg, Tomi. , Mallat, Niina. , Ondrus, Jan. , Zmijewska, Agnieszka. (2007). Past, Present and Future of Mobile Payments Research: A Literature Review: Electronic Commerce Research And Applications, 1-17.

OBJECTIVES - The main aim of the study is to review prior literature on mobile payments, analyze the various factors that impact mobile payment services markets, and suggest directions for future research in this still-emerging field.

COUNTRY - Various Countries
DATA COLLECTED- Secondary Data
DATA ANALYSIS METHOD-. Empirical Analysis

FINDINGS – The results suggest that there are three aspects which are believed as important for conducting mobile payment research. 1. The optimal portfolio of payment instruments and services. 2. Most of the researchers have focused more on the Business-To-Consumer (B2C) and Consumer-To-Consumer(C2C) scenarios, while B2B mobile commerce may also need mobile payment services. 3. To improve the quality and relevance of mobile payment research, we also recommend that researchers must collect more empirical data backed by guiding theories and understand the underlying technologies better. Furthermore, our findings indicate that the business models of mobile payment services need to evolve from limited proprietary solutions towards cooperative and standardized solutions in order to succeed.

REVIEWED ARTICLE 48

Zeinab Karake Shalhoub, (2006), "Trust, privacy, and security in electronic business: the case of the GCC countries", Information Management & Computer Security, Vol. 14 Iss 3 pp. 270 - 283

OBJECTIVES - The lack of trust in online transactions is one of the main reasons for the relatively low electronic commerce adoption, especially in developing and emerging economies such as those of the countries of the Gulf Cooperation Council (GCC).

COUNTRY -	Gulf Countries
DATA COLLECTED-	Primary data (content analysis)
DATA ANALYSIS METHOD -	Content analysis

FINDINGS - It is found that a large percentage of sites with privacy statements address the issue of notice and awareness, while none of the sites has a provision to inform users in case of any complaint, as to whom they should address their complaint, what is the arbitration and settlement methods, who is the enforcement body and finally what are the penalties and sanctions applicable.

REVIEWED ARTICLE 49

Baddeley, Michelle. (2004). Using E-Cash in the New Economy: An Economic Analysis of Micropayment Systems: Journal of Electronic Commerce Research, 5(4), 239-253.

OBJECTIVES - This paper outlines the evolution of electronic payment systems, leading to an analysis of the essential characteristics of e-cash, and microeconomic/macroeconomic implications of the development of e-cash, for this the key characteristics of successful electronic payment innovations are analyzed using binary dependent variable estimation techniques on data derived from the Electronic Payments Systems Observatory (IPO) database.

COUNTRY -	Europe
DATA COLLECTED-	Secondary Data
DATA ANALYSIS METHOD-.	Empirical Analysis

FINDINGS – The results suggest that an effective, widely accepted electronic cash system has yet to be developed and many important characteristics of conventional cash must be incorporated into current e-cash protocols if e-cash is to act as an effective substitute for other forms of money. Cash is based on a social convention and therefore trusted central banks and governments must play a key role in promoting the development of effective and popular forms of electronic cash.

REVIEWED ARTICLE 50

Kreyer, Nina. , Pousttchi, Key. , Turowski, Klaus. (2002). Characteristics of Mobile Payment Procedures: MPRA Paper 3786, University Library of Munich, Germany, 10-23.

OBJECTIVES - To define Electronic Commerce as any kind of business transaction, in the course of which transaction partners employ electronic means of communication, may it be for initiation, arrangement or realization of performance and to define Mobile Commerce as a subset of these, on condition that at least one side uses mobile communication techniques.

COUNTRY -	Europe
DATA COLLECTED-	Primary Data
DATA ANALYSIS METHOD-.	Descriptive Analysis

FINDINGS – The penetration rate with mobile devices - especially phones - is already high. The image of the devices is positive; they are accepted and associated with modernity. But above all, they accompany their users anytime, anywhere and furthermore, tend to be more personal than any other device and to become more and more an integral part of their users' lives. Thus, the mobile device tends to resemble more a purse, than a Personal Computer.

TABULAR PRESENTATION OF ARTICLES REVIEWED

S. NO	TOPIC OF THE ARTICLE	OBJECTIVE	VARIABLE	DATA COLLECTION METHOD	SOURCES	FINDINGS	OBSERVATION
1.	Digital Payments: Challenges and Solutions	The focus of this paper is to identify and explain the different methods of digital payment, we analyze the challenges of digital payments from a different perspective and provide preliminary security countermeasures for each of the issues.	INDEPENDENT VARIABLE - Challenges in digital payments DEPENDENT VARIABLE - Methods of digital payments	Primary data	Data is being collected through an online survey with the help of questionnaires.	Most of the people are using the digital payment system because of the convenience they are attaining, the need to go to banks for every purpose decreased.	Solutions are based on security issues only , others factors can also be taken
2.	Impact of digital finance on financial inclusion and financial stability.	This study examines the impact of digital finance for financial inclusion and financial system stability.	INDEPENDENT VARIABLE – Financial Inclusion and Financial Stability DEPENDENT VARIABLE - Impact of Digital Finance	Secondary data	Data is collected from research articles and World Bank reports publications.	Despite the benefits of digital finance, this article has highlighted some challenges that digital finance poses for financial inclusion and financial stability. Finally, an interesting direction for future research would be to explore the relationship between digital finance and economic crises to determine whether digital finance helps to propagate financial contagion during a crisis.	This study is based on impact of digital finance for financial inclusion and financial system stability.

3.	Mobile Telephony, Financial Inclusion, and Inclusive Growth	The paper employs the multipurpose nature of mobile telephony to investigate its welfare implications using a large sample of households in Ghana. To test for two related issues: First, To investigate whether mobile telephony promotes poor people development by helping households to e□ciently allocate consumption and navigate out of poverty. Second, To analyze whether access to a broad array of financial services enhances the capacity of households to live worthwhile lives.	Independent variable – 1.) Mobile telephony helps households to e□ciently allocate consumption and navigate out of poverty. 2.) Access to a broad array of financial services Dependent variable - 1.) Mobile telephony promotes poor development by helping poor households. 2.) Enhances the capacity of households to live worthwhile lives.	Secondary data	The ghana living standard survey round 6 data (glss 6) obtained from the ghana statistical service is the dataset used for this study.	The study established that mobile technology and financial inclusion had reduced poverty and increased household consumption per capita in the female-headed household and rural samples but they are yet to be harnessed to bridge the development gap in gender and locality. This study does not cover all the dimensions of financial inclusion. Thus, future research can employ other financial inclusion measures/dimensions to reassess the robustness of the link between mobile telephony and financial inclusion.	This study does not cover all the dimensions of financial inclusion.
4.	Digital Payment and Its Discontents: Street Shops and	The main aim of the study is to examine discussions of technology adoption within a development	Independent variable – people's (shopkeepers) attitudes	Primary Data	A total of 238 vendors were interviewed for this research. 38 in-depth	The results are as follows: 1. The shopkeepers' was to maintain the status quo in the short-term by using resources and networks to minimize cash	This research shows how a political agenda, enacted through technological intervention, can be a lens into people's

	the Indian Governme nt's Push for Cashless Transactio ns	al political discourse and to explore the tensions between imposing formality in exchanges and prevalent market practices, and also to examine the practical challenges with technology adoption for people who are relatively new to digital environments .	toward mobile payments and demonetizatio n. Dependent variable - various factors of mobile payments and the availability of cash.		semi-structured interviews on-site were conducted in different states.	shortages and continue business as usual instead of adopting digital transactions. 2. Respondents portray demonetization as both modern and righteous as a notion for a larger collective, but as detrimental to themselves as individual agents. 3. We find that digital cash adoption on an individual level relates to awareness both on the personal and collective front.	acceptance or rejection of artifacts.
5.	Mobile financial services and financial inclusion: Is it a boon for savings mobilizati on?	This study sought to establish the linkage by examining whether the pervasive use of mobile telephony to provide financial services is a boon for savings mobilization in selected countries in sub-Saharan Africa.	Independent variable – use of mobile telephony to provide financial services. Dependent variable - a boon for savings mobilization.	Secondary Data	Data is being collected from finaccess and finscope survey data and from research articles publications.	The Descriptive analysis shows that Usage of mobile financial services is skewed towards savings. The empirical results based on Kenya provide evidence regarding the impact of mobile financial services on savings. Besides enhancing the likelihood of saving, the amounts saved are also being increased. The accessibility, convenience, affordability and the safety associated with mobile financial services is a major catalyst in the expansion and growth of mobile financial services.	Expanding the scope of mobile financial savings is an avenue for promoting and mobilizing savings particularly for the poor and low-income earners who have limited access to the formal banking system.
6.	A STUDY ON	he main objectives of	INDEPENDENT VARIABLE –	Secondary data	Data is being	The study suggests more	The study is restricted to

	SECURED CASHLESS ECONOMY IN INDIA WITH REFERENCE TO INITIATIVES TAKEN BY RESERVE BANK OF INDIA (RBI) TOWARDS DIGITAL PAYMENT	this study are to analyze the various risk involved in digital payments and to understand the initiatives undertaken by RBI.	Awareness among people about cyber-security DEPENDENT VARIABLE – Initiatives taken by RBI		collected from secondary sources.	initiatives have to be intended in creating awareness and thereby educating people followed by its implementation to realize the intended benefits of a 'Cashless Economy'.	secondary data and limited to authentic published reports. Due to time constraint only few initiatives are considered.
7.	Digital payments system and rural India: A review of the transaction to a cashless economy	The objective of this research paper is to study the positive impact that Digitization of the payment system in the Indian economy will have on the development of the Rural Indian Sector.	INDEPENDENT VARIABLE – Impact of Digital Payments on the development of the Rural Indian Sector. DEPENDENT VARIABLE – To study the positive impact of Digitization of the payment system in the Indian economy.	Secondary data	Data is collected from research articles and various reports publications.	The Indian economy will digitalize in rural areas through mobile-based payments that are faster and cheaper to roll out. It is a matter of increasing awareness in rural areas. Improved solutions in terms of UPIs, mobile wallets, and digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and support in improved conditions of digital payments processing in rural sectors.	Positive impact of digital payments on the development of rural indian sector.
8.	Mobile Banking in India:	The study is aimed to evaluate the	INDEPENDENT VARIABLE - mobile	PRIMARY DATA	For this, a cross-sectional	Study shows 'mobile handset operability','privacy	This study was conducted in urban area so

	Practices, Challenges and Security Issues	perceptions and opinions of urban mobile banking users.	banking issues DEPENDENT VARIABLE - Age, sex, education, occupation and income.		descriptive design was adopted with ad-hoc quota sampling. The sample was comprised of 50 mobile banking users and 50 non-users of Ghaziabad city, India.	and security', Standardization, Issues of 'download & installation of application are some of the major issues in mobile banking.	technological aspect of application s/w, absence of local/preferred language and telecom service quality like network unavailability were not perceived as major issues and more focus can be given on privacy and security.
9.	A Cashless Society for All: Determining Consumers' Readiness to Adopt Mobile Payment Services	This research is an effort to provide insights on how to increase adoption and reduce the gender gap in mobile payment services through regression analysis.	INDEPENDENT VARIABLE – The moderating effect of gender on the adoption of mobile payments. DEPENDENT VARIABLE - To determine consumers' readiness to adopt mobile payment services.	PRIMARY DATA	The data were collected by using an online self-completion questionnaire administered in all nine provinces in South Africa. Participant recruitment for the study was done through a market research firm using convenience sampling from their consumer panel.	There is a need to create a trustworthy brand for service providers before offering mobile payment services, the focus should be on promoting mobile payments in areas characterized by a large consumer base such as the retail and public transportation and adequate investment should be made in infrastructure and effective promotion of mobile payments.	This study shows the effect of gender on adoption of mobile payments.

10.	The digital revolution in financial inclusion: international development in the fintech era	This paper examines the growing importance of digital-based financial inclusion as a form of organizing development interventions through networks of state institutions, international development organizations, philanthropic investment, and fintech companies.	Independent variable –the growing importance of digital-based financial inclusion as a form of organizing development interventions. Dependent variable - importance of financial inclusion is based on networks of state institutions,international development organizations, philanthropic investment, and fintech companies.	Secondary Data	Data is being collected from the 2014 world bank's flagship global financial development report and existing literature.	This article has highlighted how the normalization of the subprime 'moment' as 'business as usual' worldwide is being facilitated via a global program of market-based financial development. Contestation to such a well-resourced program of incorporation would be limited. Further empirical research is needed to explore in more depth the processes of financial governance and the impossibility of emergent forms of resistance which make an effort to induce new populations to Conform to the 'ethos of commodity calculation'.	This research is based on secondary data
11.	The long-run poverty and gender impacts of mobile money	The aim of this paper is to estimate that access to the Kenyan mobile money system M-PESA increased per capita consumption levels and lifted Kenyan households out of poverty.	INDEPENDENT VARIABLE – Access to M-PESA (A Kenyan mobile money system) DEPENDENT VARIABLE - Effect on per capita consumption levels	PRIMARY DATA	Data is collected from various reports publications	The result is being observed that No evidence has been found that mobile money has increased the overall safety and convenience of households' store of value. The results suggest that having a private, low-cost means of managing financial resources is necessary. Although mobile phone use correlates well with economic development, mobile money	This study shows long run effects of m-pesa on economic lives of households.

						causes it.	
12.	The intention of adoption of mobile payment An analysis in the light of the Unified Theory of Acceptance and Use of Technology (UTAUT)	This article aims to evaluate the intention of adopting a future mobile payment service from the perspective of current Brazilian consumers of mobile phones, based on the Unified Theory of Acceptance and Use of Technology (UTAUT).	INDEPENDENT VARIABLE – The intention of adopting a future mobile payment service from the perspective of current Brazilian consumers of mobile phones DEPENDENT VARIABLE - Unified Theory of Acceptance and Use of Technology (UTAUT)	PRIMARY DATA	Data is being collected through survey method and convenience sampling method is used	This paper provides information to the business sectors involved to assess the reaction of the market before a possible launch of the referred service and allows them to build their respective strategies of segmentation and communication, from the understanding of the factors that precede intention of adoption.	This study is undertaken only on consumer behaviour for adoption of mobile payments method.
13.	Understanding cashless payments in India	This paper analyzes India's gradual transition towards a cashless economy.	Independent variable – preferences of consumers and sellers to adopt cashless payments. Dependent variable - various factors of cashless payments on which consumers decisions for adoption are	Secondary Data (survey data is being used)	Data is being collected from surveys conducted in 2011 and 2014 (from world bank's global findex), as well as household and enterprise surveys conducted in 2009–2010.	This paper reveals that the most crucial enabler of cashless payments is inflows of funds into the accounts. Some of the key estimates are: 1.) A significantly higher proportion of individuals make cashless payments now (12.61% in 2014 as compared to 3.47% in 2011) 2.)The number and the monetary value of cashless transactions have a CAGR of 19.91% and 24.14%. 3.) Most growth in cashless payments has been through mobile payments. We also found that as more payments are	Based on the findings, we suggest possible policy interventions.

			based on.			directly credited to the account, cashless payments increase significantly.	
14.	Trends in mobile payments research: A literature review	This paper presents the findings of a review of the literature aimed at identifying the key research themes and methodologies researched. In order to uncover these trends, the authors reviewed the top twenty cited papers since 1999 and the twenty most recently published papers on m-payments since August 2014.	INDEPENDENT VARIABLE – Review of literature on mobile payments DEPENDENT VARIABLE – To identify the key research themes and methodologies used	SECONDARY DATA	Data is collected from existing literature publications.	The study of m-payment systems can no longer be considered a fad or fashion, but an established research domain that will continue to receive increased attention from researchers from diverse disciplines in the coming years. So, stakeholders who are engaged in the design and delivery of m-payment systems will realize the potential of m-payment systems and the universal adoption of such systems will become the reality.	Most of the studies are done on consumer, and merchants but less are done on MNO and financial institutions.

15.	Pradhan Mantri Jan Dhan Yojana (Pmjdy): A Leap towards Financial Inclusion in India	The present paper endeavors to examine the progress of Financial Inclusion Initiatives in India and to study the changing trends in financial inclusion with special reference to Pradhan Mantri Jan Dhan Yojana.	INDEPENDENT VARIABLE – To study the recent trends in financial inclusion in India with special reference to Pradhan Mantri Jan Dhan Yojana (PMJDY), highlighting its key areas DEPENDENT VARIABLE - Strategies to ensure maximum financial inclusion for the underprivileged and unbanked areas.	SECONDARY DATA	Data was collected from the Govt. web sources, RBI reports, NABARD reports, IBA Bulletin websites, journals, magazines, bank web sources.	This paper reveals that Financial inclusion broadens the resource base of the financial system by developing a culture of savings among a large segment of the rural population and plays its own role in the process of economic development. Financial inclusion also mitigates the exploitation of vulnerable sections by the usurious money lenders by facilitating easy access to formal credit.	This study identifies recent trends in financial inclusion in india with special reference to pradhan mantri jan dhan yojana (pmjdy).
16.	Mo(bile) Money, Mo(bile) Problems: Analysis of Branchless Banking Applications in the Developing World	The main aim of the study is to evaluate the claims on applications that are not subject to the traditional regulations applied in the financial sector. The first in-depth measurement analysis of	INDEPENDENT VARIABLE – Traditional regulations applied in the financial sector. DEPENDENT VARIABLE - Claims on applications that don't relate to traditional regulations.	SECONDARY DATA	Data is taken from the GSMA Mobile Money Tracker, a total of 47 Android mobile money apps across 28 countries are being identified.	This paper reveals that there are significant vulnerabilities in six of the seven applications, which prevent both users and providers from reasoning about the integrity of transactions. Dramatic improvements to the security of branchless banking applications are imperative to protect the mission	This study is based on traditional regulations in financial sector.

		branchless banking applications was performed of all 46 known Android mobile money apps across the 246 known mobile money providers and demonstrate that automated analysis fails to provide reliable insights.				of these systems.	
17.	Effects of Cashless Economy Policy on financial inclusion in Nigeria: An exploratory study	The objective is to conduct empirical research regarding the relationship between the Cashless economic policy and financial inclusion in Kano, Nigeria.	INDEPENDENT VARIABLE – Change in business models of financial service providers, awareness of electronic channels, using enhanced formal financial services, accessibility of payments infrastructure. DEPENDENT VARIABLE - Effects of Cash-less	PRIMARY DATA	The research design for this study was a cross-sectional survey.	The result is that Infrastructure has the highest contribution in the model followed by customer value and awareness. The results show that awareness, customer value, and infrastructure have a significant statistical association with the financial inclusion of working-age adults. On the contrary, change in business models of financial service providers is found to have an insignificant relationship with financial inclusion.	Effects of business model, awareness, accessibility of financial services on financial inclusion.

			economic policy on financial inclusion in Nigeria				
18.	Competition and Challenges of Mobile Bankings: A Systematic Review of Major Bank Models in the Thai Banking Industry	This study investigates the competition and challenges of the mobile banking system in Thailand. The empirical study focuses on the leading banks in Thailand: Bangkok Bank, Kasikorn Bank, Siam Commercial Bank, Krung Thai Bank and Bank of Ayudhya. It also discusses the strategies, SWOT analyses of the mobile banking industry in the move towards the mobile money economy.	Independent variable – competition and challenges of the mobile banking system in thailand Dependent variable – impact on the usage of mobile banking services.	Primary Data	Data is collected from interviews and documentary investigation.	The results provide insightful implications on future challenges and increasing competition under 3G and 4G mobile phone networks whereby the e-payment market will get bigger when Thailand would enter the ASEAN Economic Community (AEC — upcoming regional competition in AEC countries) in 2015.	This study is based on 46 interviews in the banking and ICT industries and documentary investigation. Interview data were supported by an examination of secondary data. The sample size in this study covers only the major banks providing mobile banking services in Thailand.
19.	Mobile banking and mobile money adoption	This paper provides insight into the lack of mobile money	INDEPENDENT VARIABLE The study perceived mobile	PRIMARY DATA	Data is being collected through surveys,	About 67 % used prepaid SIM cards with their mobile phones and 29 % indicated that in addition to their use	There is a lack of adoption of mobile phones for mobile banking and

	for financial inclusion	adoption in West Africa through an information and communication technology (ICT) study in Nigeria, the largest country in West Africa.	phones as easy to use for various tasks including mobile banking and mobile money transfers and whether mobile money services were adopted. DEPENDENT VARIABLE - Adoption of mobile money services.		focus group interviews and observation methods.	of mobile phones/ prepaid SIM cards, they also use public paid phones. The results for the ease of using a mobile phone for other tasks were different. 33 % said it was extremely difficult, 13.5 % indicated that it was quite difficult. Respondents facing some level of difficulty in using mobile phone for class-related work, therefore, stood at 46.5 % and those who found it easy to use mobile phones for class assignments was 27.7 %.	money transfers.
20.	Mobile payments: a scoping study of the literature and issues for future research	This paper seeks to fill the knowledge gap by providing a comprehensive scoping study, which seeks to map out the literature published between 2001 and 2011 and to show how future research can make improvements in the field.	INDEPENDENT VARIABLE – To review the literature published between 2001 and 2011. DEPENDENT VARIABLE - To provide a comprehensive picture of the knowledge, production, and dissemination of mobile payments and shows how future research can	SECONDARY DATA	Data is being collected by reviewing the existing literature.	There is a scope of future research. Money, as we know it today, will soon be largely handled by electronic devices. Moreover, this trend should be welcomed for the sake of social and economic development and to benefit a large section of the public.	various payments schemes are less explored

			make improvements in the field.				
21.	Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India	The purpose of this paper is to accomplish two objectives – to test the functional relationship between adoption readiness (AR), perceived risk (PR) and usage intention for mobile payments in India and to investigate the stability of proposed structural relationships across different customer groups.	INDEPENDENT VARIABLE - Gender, age, education and occupation. DEPENDENT VARIABLE - Customer's usage intention of mobile payment services.	PRIMARY DATA	Data is being collected through structured questionnaires.	On appraising the proposed model, five out of six hypotheses were fully supported while one hypothesis was partially supported. Test of invariance showed significant variance among users and non-users.	The result of the study focuses on educated customers with operational bank accounts.
22.	Cyber Security Challenges in Smart Cities: Safety, security, and privacy	The main objective of the study is to examine two important and entangled challenges: security and privacy. Security includes illegal access to information and attacks	Independent variable – Perceived security and perceived trust Dependent variable - EPS usage	SECONDARY DATA	Data is being collected from secondary sources	Matching the daunting security vulnerabilities Smart City systems may present in the hands of unwitting users is the absence of a clear theory of law and rights to define what can and should be done with the power these systems represent.	The study is restricted to urban area only , so it can be undertaken in rural area too.

		causing physical disruptions in service availability.					
23.	Analysis of E-Commerce and M-Commerce: Advantages, Limitations and Security issues	Study the Overview of E-commerce and M-commerce. * Understand the relationship between m-commerce and e-commerce. * Discuss the current advantages and disadvantages of E-commerce and M-commerce. * Analysis of Global e-commerce sales are growing * Analyze of Current Internet Retail Sales by Region: 2005-2015. * Identify the M-Commerce Applications * Discuss M-COMMERCE VERSUS E-COMMERCE * Study of Security	INDEPENDENT VARIABLE - Factors of relationship between E-commerce and M-commerce DEPENDENT VARIABLE - E-commerce and M-commerce	SECONDARY DATA	Data is collected from various reports and published data	Day by day E-commerce and M-commerce playing a very good role in online retail marketing and peoples using this technology day by day increasing all over the world.	This study has not focused more on security issues.

		Issues in Online marketing.					
24.	Mobile Money: Communication, Consumption, and Change in the Payments Space	It's objective is to understand how 'agency' inflects debates over money, its meaning and its pragmatics, and its transformation in new communicative infrastructures, and how it might inform anthropology and political struggles over money and payment.	Independent variable – economic techniques and social narratives about markets and opportunities for profit and financial inclusion in the 'payments space. Dependent variable - establishing of a consumer market for mobile money.	Secondary Data	Data is being collected from the field-work and research collaborations and through interviews.	It recognizes the limitations and costs of cash, but, at the same time, acknowledges the vital social role that physical and proximate payments serve in creating trust, maintaining relationships, and maintaining relationships to other relationships. Money as a bridge we all continually build.	This article is based on an unusual form of field-work.
25..	An extension of the TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece	This paper presents an extended technology acceptance model (TAM) with concepts from the innovation diffusion theory (IDT) and customers' perceived risk, aiming to examine the factors affecting Greek customers' intentions to adopt internet banking services.	INDEPENDENT VARIABLE - Proposed service's compatibility, perceived ease of use, perceived usefulness, perceived security and privacy risk, customers' demographics and IT competences. DEPENDENT VARIABLE - Age, gender, IT experience.	Primary Data	Data is being collected through personal interviews and questionnaire	The results indicated that service compatibility is the key factor, which mostly shapes customers' behavioral intentions toward internet banking adoption, followed by TAM constructs and perceived risk elements.	Limitations of the study concern the measures of technology acceptance.

		Furthermore, several individual differences are examined, with respect to their impact on the formation of customers' attitudes about the pros and cons of the new technology.					
26.	A Digital Pathway to Financial Inclusion	This paper focuses that the commercial assets required to navigate the pathway to an inclusive digital economy vary across the four stages of market development. So, Financial regulations and business models must, therefore, be calibrated to harness those assets at each stage.	INDEPENDENT VARIABLE – Commercial assets required to navigate the pathway to an inclusive digital economy. DEPENDENT VARIABLE - Effects of Financial regulations and business models over commercial assets.	SECONDARY DATA	Data is being collected from various journal publications and various reports.	This paper reveals that Mobile operators will have to convert their closed APIs into open platforms that make it easier for application providers to integrate with their payment systems. And policymakers are unlikely to see material gains in digital financial inclusion if they cling to regulatory models which fail to distinguish between the risks posed by payments from those posed by financial intermediation. The digital pathway to financial inclusion will indeed be carved by those willing to revisit long-held assumptions in financial services regulation,	This study is based on effects of financial regulations and business models over commercial assets.

						telecommunications, and banking.	
27.	Addressing Security and Privacy Risks in Mobile Applications	Assessment of security risks in mobile applications.	INDEPENDENT VARIABLE - various security issues DEPENDENT VARIABLE - Mobile applications	SECONDARY DATA	Data is being collected from secondary sources	All applications must undergo a thorough security assessment10, 11 before being released into production to confirm that attack surfaces discovered during threat modeling have been addressed. A security assessment can also expose security gaps between project designs and approved corporate policies, which might have evolved during development, or problems resulting from the integration of different modules.	This study is based on secondary data collected from published work so it can be done through primary data collection.
28.	Mobile Money: The Economics of M-PESA	The main aim of the study is to conduct two rounds of a large survey of households based on	Independent variable – mechanics of m-pesa and adoption across households according to	Primary Data	A survey was conducted of 3000 households randomly selected across	This paper provides a description of the service and a review of the potential economic effects primarily at the household level, but also in terms of	Both the surveys' were based on random sampling and were conducted in the year 2008 and 2009.

		various socioeconomic characteristics for which the technology is used in Kenya and to summarize the mechanics of M-PESA and review its potential economic impacts. To report findings from a survey of M-PESA agents, who provide cash and cashout services, and highlight the inventory management problems they face.	income and wealth, location, gender, and other socio-economic characteristics Dependent variable - potential economic impacts of m-pesa in different aspects.		kenya.	macroeconomic and monetary aggregates. It then provides a detailed portrayal of patterns of use across urban and rural populations, using data from the first large household survey focused on money transfer services in Kenya.	
29.	The times they are a-changing': Mobile payments in India	The main aim of the study is to report on an ethnographic study of payment and banking practices in India and to inform on the development of interface elements, applications, and services that would support the needs which are	Independent variable – ethnographic study of payment and banking practices in india Dependent variable - to ensure the development of interface elements, applications, and services	Primary Data	Unstructured one-to-one interviews with open-ended questions and fieldwork were used to collect data.	As m-payments develop we are bound to see unexpected innovations and changing practices but balancing creativity while looking at how they might work in reference to today's practices seems a good place to start.	In this study, unstructured one-to-one interviews with open-ended questions were conducted.

		uncovered in the article.	that would support the needs				
30.	Mobile Money and Payment: A Literature Review Based on Academic and Practitioner - Oriented Publications(2001 - 2011)	The aim of this review is to map out the existing knowledge on mobile money and defining the topics that are most frequently researched and it also examines which locations are most of the studies focused on, and which methodologies are being applied to these studies.	Independent variable –to map out the existing knowledge on mobile money and find out the main sources of information on the subject, and defining the topics that are most frequently researched. Dependent variable - determining factors and contexts of the published studies on mobile money.	Secondary Data	A comprehensive survey of the published literature in peer-reviewed, non-peer-reviewed, indexed journals and conference proceedings and practitioner-oriented sources.	By examining peer-reviewed and non-peer-reviewed papers from relevant academic and non-academic sources, the studies are concentrated in a few cases/countries, with emphasis on Kenya and the Philippines, although there are experiences in dozens of other countries.	This study is based on secondary data.
31.	Financial Inclusion and Financial Integrity: Aligned Incentives	To analyze preliminary data from FinScope surveys on eight African countries to find that an increase in access to formal services does not automatically imply an immediate and corresponding reduction of usage of informal services.	INDEPENDENT VARIABLE – Increasing Access to formal services DEPENDENT VARIABLE – 1). Reduction in usage of informal services. 2.) Use of formal and informal services in parallel 3.) Transparency between	SECONDARY DATA	Survey reports and existing literature on formal as well as informal services.	This paper reveals that if we see it, from an individual customer's perspective financial inclusion may not be a permanent or all-encompassing state. Current customers may become unbanked and FinScope data shows that a significant group of financially included customers continue to use informal financial services. Lack of trust will be a barrier to financial inclusion. data	This study is based on increasing access to formal services and reduction in usage of informal services.

			formal and informal services			protection and privacy should rather be embraced and supported by the FATF (Financial Action Task Force).	
32.	M-Pesa: A Case Study of the Critical Early Adopters' Role in the Rapid Adoption of Mobile Money Banking in Kenya	This study reviews key factors that led to the phenomenal growth of mobile money banking services in Kenya using M-PESA, "mobile cash money", the leading mobile money service provider as a case study. The study considers the outstanding challenges experienced by users, possible solutions and future trends.	Independent variable – growth of mobile money banking services. Dependent variable – challenges faced by users, their possible solutions and future trends.	Primary and Secondary Data	The questionnaire was made available.	This paper concluded that M-PESA has revolutionized the way financial services are accessed in Kenya and has a bright future with several value-added services waiting to be tapped. About 47% of the respondents are satisfied with the service as it is. However, the remainder suggested various solutions to address several security and service provision challenges.	A survey was conducted and only 67 people completed all of the questions outlined in the questionnaire, which is a limited number.
33.	Cooperation for Innovation in Payment Systems: The Case of Mobile Payments	The main aim of this paper is to study the prospects of mobile payments in developed countries and to analyze the potential business models that could result from the cooperation of banks and mobile	Independent variable – to study the prospects of mobile payments in developed countries, and to analyze the potential business models. Dependent variable - cooperation of banks and	Secondary Data	Data is being collected from various reports publications	The five cooperation models for the development of mobile payment solutions are the light model, the bank-centric model, the mobile-centric model, the partial-integration model, and the full integration model. Though they seem necessary to target the mass market, we argue that the partial- and full-integration models are more	This study is based on surveys' already conducted and on secondary data.

		network operators.	mobile network operators.			costly to implement, in particular, due to the industry cost structure, which involves high fixed costs and low marginal costs. On the other hand, the proliferation of mobile payment solutions with the light model (or with the bank-centric and mobile centric-models) might restrict mobile payments to niche markets.	
34.	Mobile Money: Implications for Emerging Markets	This paper addresses the economics and policy issues of mobile money : - What are the economics of mobile money? What policy issues does it raise? Is it a threat to the traditional banking system? How should it be regulated? What can we learn from the microfinance literature? Do we have empirical evidence of its impact on growth and development ?	Independent variable – the ability of microfinance stimulates and enhance economic activity. Dependent variable - the positive economic impact of the improved telecommunications infrastructure and microfinance	Secondary Data	Itu data and various reports.	We predict a huge market will fuel and accelerate the anticipated explosive growth of m-money based on communications services in emerging markets worldwide. We believe that this hybrid system of mobile devices and microfinance will have a transformative effect on the developing countries economies.	This research is based on secondary data.
35.	Mobile 2.0: M-Money for	This paper explores the reach and	Independent variable – to explore the	Secondary Data	Data is being collected	This paper reveals that A large percentage of them	This research is based on secondary data.

	the BOP in the Philippines	use of m-money among the bottom of the pyramid (BoP) in the Philippines using survey data from LIRNEasia's 2008 Mobile 2.0 surveys.	reach and use of m-money among the bottom of the pyramid (bop) in the philippines. Dependent variable - m-money's potential and actual use for remittance among internal and external migrant workers and their families		from lirneasia's 2008 mobile 2.0 surveys, focus group data and literature on mobile and electronic money.	have relatives working abroad or in other parts of the country, and based on the LIRNEasia survey, only 13% of the BoP have bank accounts. However, despite the application's obvious relevance to many Filipinos at the BoP, and their knowledge of the financial services offered through mobile phones, only 1% of the BoP have used it for banking services, and only 5% have made payments or received money through this method.	
36.	A survey of system platforms for mobile payment	The main aim of the study is to describe the advantages and disadvantages of the most common mobile payment platforms recorded in the literature and offers a ranking of the technologies considered.	INDEPENDENT VARIABLE – Different Application Platforms of mobile payments system and there Advantages and Disadvantages. DEPENDENT VARIABLE - Mobile payments system	PRIMARY AND SECONDARY DATA	The questionnaire and various researchers' publications were used to collect data.	The results suggest that SIM-based application with binary SMS is the best solution for Iran. It also shows that the importance of each criterion will be different according to the stakeholder involved. Service providers are expected to view the criteria from different perspectives compared to end-users having different priorities.	This study identifies advantages and disadvantages of mobile payments platforms.
37	Mobile	This paper	INDEPENDENT	SECONDARY DATA	Data is	As domestic and	This study is

.	Money Transfer Services: The Next Phase in the Evolution in Person-to-Person Payments	reviews development in mobile money transfers, the emerging ecosystem, and its participants and business models. It also examines the implications of payment systems roaming across geographic borders with their respective legal and regulatory jurisdictions, as well as the emergence of mobile airtime as an alternative currency.	VARIABLE – Developments in mobile money transfers, the emerging ecosystem, its participants and business models. DEPENDENT VARIABLE – 1.) Implications of payment systems. 2.) The emergence of mobile airtime as an alternative currency		collected from various surveys'.	international mobile money transfer services grow more prevalent, discussions on risk management and payment system integrity will be imperative. Dialogue with all industry stakeholders, including regulators and policymakers, is essential to creating an environment in which payments risk issues are clearly understood. In this way, risk-based regulation that is proportionate with the need to encourage innovation and efficiency in retail payments can be best achieved.	undertaken to identify the development of mobile money transfer services and business model.
38.	Predicting young consumers' take-up of mobile banking services.	This paper aims to investigate the barriers to adopting mobile banking services. For these two models are tested	INDEPENDENT VARIABLE Behavioural intention. DEPENDENT VARIABLE - A research model extends the TAM model by	PRIMARY DATA	Data was collected using an online survey questionnaire.	The results of the study indicated that compatibility, perceived usefulness, and risk are significant indicators for the adoption of m-banking services. Trust and credibility are crucial in reducing the overall	Advantages (compatibility, usefulness and ease to use) and barriers (cost, risk, trust and credibility) to adopt mobile payments.

		Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT), which is better able to predict consumers' intention to use mobile banking Design	additionally examining the effects of compatibility, trust, credibility, perceived risk, and cost.			perceived risk of m-banking.	
39.	The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya	This paper aims to investigate the success factors attributable to the use of mobile payments by micro-business operators.	INDEPENDENT VARIABLE – Usage of mobile payment technology and M- PESA and whether the actual usage results in the success and growth of the micro-businesses. DEPENDENT VARIABLE - Factors that enhance the behavioral intention to use mobile payments.	PRIMARY DATA	The study is based on a survey conducted through the administration of questionnaires. The data was collected from a sample of 409 micro-business entrepreneurs in Nairobi, Kenya.	The results show that perceived convenience had an influence on the intention to use mobile payment services. Secondly, perceived support from the mobile payment services provider influences the intention to use. Thirdly, perceived support from the mobile services provider had an impact on the perceived convenience. Fourthly, perceived ease of accessibility had an impact on the intention to use mobile payment services. Majority of the micro-business operators who completed the survey questionnaire strongly agree that the accessibility of the mobile phone payment is easy.	Study on informal sectors' s micro entrepreneurs is only done

40.	Understanding consumer acceptance of mobile payments services: An empirical analysis.	This research focuses on the factors determining consumers' acceptance of mobile payment services.	INDEPENDENT VARIABLE – Consumers acceptance of mobile payment services DEPENDENT VARIABLE – 1.)Factors determining consumers' acceptance of mobile payment services. 2.)Effects of compatibility, individual mobility, and subjective norms.	PRIMARY DATA	A survey-based on the National Census bureau and stratified sampling approach was followed.	In order to consider adopting mobile payment services, people must find them to be reconcilable with their existing behavioral patterns. This is an important finding since perceived compatibility is not a part of the original TAM and thus is often not co nsidered as accept ance by researchers. The same is true for the second factor. An individual's mobility is a key driver of mobile payment acceptance. Mobile payment services are likely to gain insignificance in the future.	Factors necessary for adopting digital payments by consumers : preceived usefulness, security, ease to use, compatability and individual mobility.
41.	An empirical study of customers' perceptions of security and trust in e-payment systems	The principal objective of this research is to empirically examine, from the viewpoint of consumers, the determinants that affect consumers' perceptions of security and trust, as well as the effects of	Independent variable – Perceived security and perceived trust Dependent variable - EPS usage	PRIMARY DATA	Data is being collected through a questionnaire by mail and personal visits.	This study finds no evidence of a statistically significant relation-ship between the quality of transaction procedures and consumers perceived security or perceived trust in EPS use.	It does not include all the factors that affect consum-ers' use of EPS. For example, factors, such as specific e-paymentfunctions, and social and individual factors can be taken into con-sideration in future research. Special attention should also be paidto human factors, management,

		perceived security and perceived trust on the use of EPS.					education, awareness, and othernon-technology factors in order to prevent security risks
42.	Poor People Using Mobile Financial Services: Conserva-tization on Customer Usage and Impact of M-PESA	The research provides insights into how poor people use M-PESA, its impact on their lives, and some unexpected consequences.	Independent variable – use of m-pesa by poor kenyans. Dependent variable - the impact of m-pesa on their lives, and some unexpected consequences.	Primary Data	Data is collected through interviews, and focus groups were organized during the fieldwork.	This study focuses that Much of the data is not readily available, so there remains agnostic on the question of how likely it is that the M-Pesa success will be replicated elsewhere.	The observations are based on a 14-month ethnographic study that is concluded in November 2008.
43.	Seeking Fertile Grounds for Mobile Money	In this paper, we seek to understand the environmental dynamics affecting the uptake of mobile money. We demonstrate that, aside from strong strategy and good business models, the impact of financial services in developing countries is dependent on the extent of market penetration and the political environments in which they take root.	Independent variable –1.) Environmental dynamics 2.) The extent of market penetration Dependent variable - 1.) Affecting the uptake of mobile money. 2.) The impact of financial services in developing countries depending on market penetration and political environment.	Secondary Data	Data is being collected from various reports and other publications.	This paper reveals that the global experience with mobile money is patchy: highly successful in Kenya. Quantifying the factors outlined in this paper across a large number of countries would help shed light on the practical uniqueness of the Kenyan situation. Unfortunately, much of the data is not readily available, so we remain agnostic on the question of how likely it is that the M-Pesa success will be global experience with mobile money is patchy: highly successful in Kenya replicated elsewhere.	This research is based on secondary data

44.	Mobile Remittances: Design for Financial Inclusion	This paper investigates the design requirements for international mobile remittances in the context of users' money management and control in the household and the family.	Independent variable –the design requirements for international mobile remittances in the context of users' money management and control in the household and the family. Dependent variable - users' money management and control	Secondary Data	Data is collected from existing literature publications.	This paper connects the business and technological literature around mobile transfers with the remittance literature, focusing on insights into money management and control. Through scenarios and personas, it emphasizes the importance of placing the user at the center of his or her social and cultural context.	This research is based on secondary data.
45.	An Empirical Analysis of Surcharging Card Payments and Payment Behaviour in the Netherlands	An empirical analysis of the impact of surcharging on the demand for debit card services, and the effect of removing the no-surcharge rule on card acceptance by retailers and on consumer payment choice.	Independent variable – surcharge on debit cards dependent variable - the impact of a surcharge or no - a surcharge on the demand for debit card services.	Primary Data	Primary data is collected using internet surveys.	Results of the study indicate that Removing debit card charges will lead to more debit card payments and reduce the use of cash. Share of debit card payments in the total number of payments in a store will on average increase by 8% if the retailer decides not to surcharge anymore. Prohibiting the ability to surcharge may also have adverse effects on cost efficiency. It is therefore important that merchant fees for payment transactions (cash and card payments) reflect the true costs. Cost savings by other players in the payment chain should be passed onto consumers and merchants to ensure that.	This study is based on data collected using internet surveys
46.	Exploring Consumer	To explore consumer	INDEPENDENT VARIABLE -	PRIMARY DATA (FOCUS	The data for this	Consumers were willing to use mobile	This research is based on the

	Adoption of Mobile Payments - A Qualitative Study	adoption of mobile payments by empirically examining the adoption determinants that are specific for the mobile payment context.	Experience on mobile phone use. DEPENDENT VARIABLE - Factors that affect consumer adoption of mobile payments.	GROUPS INTERVIEWS)	study were collected in the Micropaym ent project in the Helsinki School of Economics.	payments in specific situations and for specific purchases but not to substitute them for existing payment systems. So more attention should be paid in particular to usability and pricing of the service, and creation of critical mass.	advantages and barriers of mobile payments , adoption of mobile payments based on advantages.
47 .	Past, Present or Future of mobile payments research: A Literature Review.	The main aim of the study is to review prior literature on mobile payments, analyze the various factors that impact mobile payment services markets, and suggest directions for future research in this still-emerging field.	INDEPENDENT VARIABLE – Consumer Perspective of mobile payments as well as technical security and trust. DEPENDENT VARIABLE – Analyze various factors that impact the mobile services market.	SECONDARY DATA	Collected from online academic journals and conference databases.	The results suggest that there are three aspects which are believed as important for conducting mobile payment research. 1. The optimal portfolio of payment instruments and services. 2. Most of the researchers have focused more on the Business-To-Consumer (B2C) and Consumer-To-Consumer(C2C) scenarios, while B2B mobile commerce may also need mobile payment services. 3. To improve the quality and relevance of mobile payment research, we also recommend that researchers must collect more empirical data backed by guiding theories and understand the underlying technologies better. Furthermore, our	No study is being done on social and cultural factors which influence mobile payment services.

						findings indicate that the business models of mobile payment services need to evolve from limited proprietary solutions towards cooperative and standardized solutions in order to succeed.	
48.	Trust, privacy, and security in electronic business: the case of the GCC countries	The lack of trust in online transactions is one of the main reasons for the relatively low electronic commerce adoption, especially in developing and emerging economies such as those of the countries of the Gulf Cooperation Council (GCC).	INDEPENDENT VARIABLE - Factors for trust and security DEPENDENT VARIABLE - Level of trust and security	Primary data(content analysis)	The author conducts a content analysis of the privacy policies and security mechanisms of a sample of companies from the six countries of the GCC which are engaged in electronic commerce transactions.	It is found that a large percentage of sites with privacy statements address the issue of notice and awareness, while none of the sites has a provision to inform users in case of any complaint, as to whom they should address their complaint, what is the arbitration and settlement methods, who is the enforcement body and finally what are the penalties and sanctions applicable.	As this study is based on content analysis, it could be done through various other methods.
49.	Using E-Cash in the New Economy: An Economic Analysis of Micropayment Systems	This paper outlines the evolution of electronic payment systems, leading to an analysis of the essential characteristics of e-cash, and microeconomic/macroeconomic implications	Independent variable – evolution of electronic payment systems. Dependent variable - an analysis of the essential characteristics of e-cash, and microeconomic or macroeconomi	Secondary Data	An empirical analysis was conducted using data derived from the electronic payment systems observatory (epso) database.	The results suggest that an effective, widely accepted electronic cash system has yet to be developed and many important characteristics of conventional cash must be incorporated into current e-cash protocols if e-cash is to act as an effective substitute for other forms of money. Cash is based on a	An empirical analysis was conducted using data derived from the Electronic Payment Systems Observatory (ePSO) database.

		of the development of e-cash, for this the key characteristics of successful electronic payment innovations are analyzed using binary dependent variable estimation techniques on data derived from the Electronic Payments Systems Observatory (ePSO) database.	c implications of the development of e-cash.			social convention and therefore trusted central banks and governments must play a key role in promoting the development of effective and popular forms of electronic cash.	
50.	Characteristics of Mobile Payment Procedures	To define Electronic Commerce as any kind of business transaction, in the course of which transaction partners employ electronic means of communication, may it be for initiation, arrangement or realization of performance and to define Mobile Commerce as a subset of these, on condition that at least one side uses mobile communication	Independent variable – the acceptance of mobile payment procedures. Dependent variable – impact of costs, security and convenience issues on acceptance of mobile payments procedures.	Primary Data	Interviews were undertaken to collect data.	The penetration rate with mobile devices - especially phones - is already high. The image of the devices is positive; they are accepted and associated with modernity. But above all, they accompany their users anytime, anywhere and furthermore, tend to be more personal than any other device and to become more and more an integral part of their users' lives. Thus, the mobile device tends to resemble more a purse, than a Personal Computer.	This research study is based on limited payment methods.

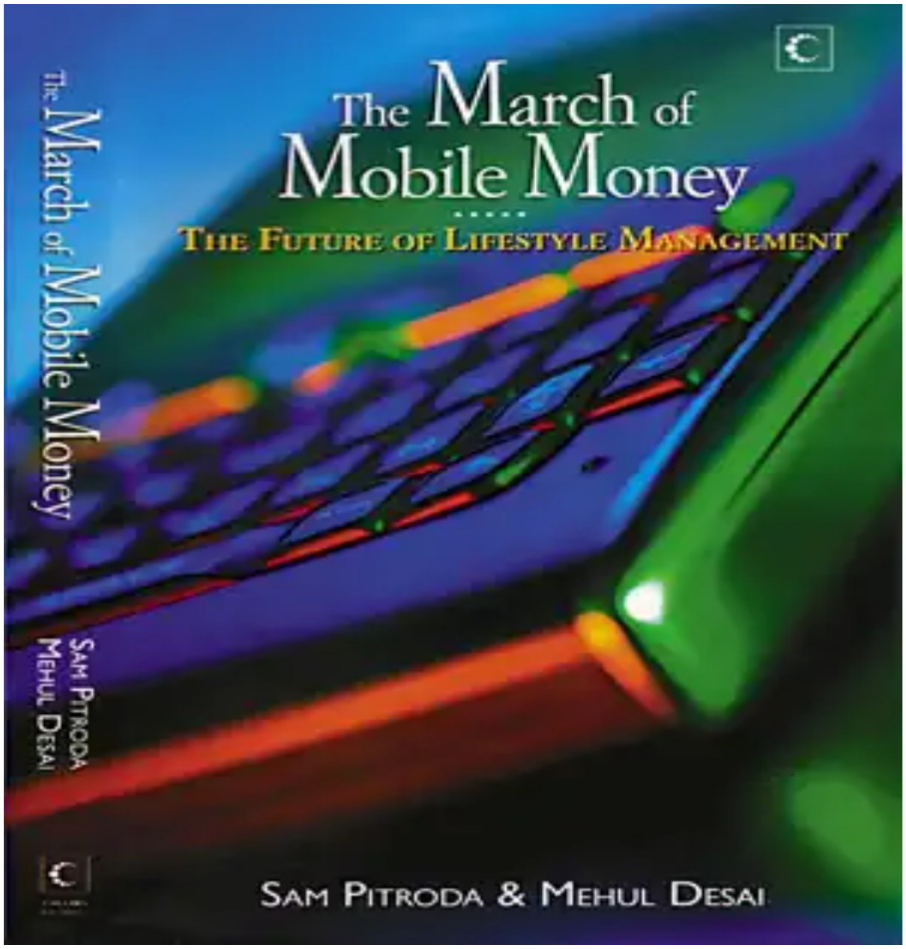
		techniques.					

RESEARCH GAP

After a review done on research work on Cyber-security in Digital payments, it was found that most of the studies are done on adoption of digital payments on the basis of cyber-security, security issues, its' challenges, and solutions, its' impact on various sectors. Some of the researchers suggested measures, which can help in identifying the gaps and suggestions to fill them for obtaining knowledge on other aspects of digital payments. Not much of the studies have taken place on the impact or effects of cyber-security in digital payments.

A study can be undertaken on the effect of cyber-security on financial inclusion towards digital payments. It could depend on different demographic variables such as Age, Gender, Education and Marital status. Therefore, this research study can be a modest attempt to fill this gap and to study and analyze the level of awareness about cyber-security among customers towards digital payments.

BOOK REVIEW: 1


The March of Mobile Money
THE FUTURE OF LIFESTYLE MANAGEMENT
SAM PITRODA & MEHUL DESAI
The March of Mobile Money
SAM PITRODA
MEHUL DESAI

Book Review 1:

Name of the Book	**:**	"The March Of Mobile Money: The Future Of Lifestyle Management"
Author	:	SAM PITRODA & MEHUL DESAI
Publisher	:	An imprint of HarperCollins Publishers.
Published Year	:	2010
ISBN	:	978-81-7223-865-0
Number of Pages	:	248

The book under review is "The March of Mobile Money: The Future Of Lifestyle Management"

The primary thesis of this book stems from many seminal changes in the world of telephony, particularly in mobile wireless telephony, and associated implications on banks, merchants and consumers. They draw from the following points to know a perspective on how the world of mobile telephony and secure mobile transaction opportunities will bring about a profound transformation in the manner we manage, monitor, move, mobilize and manufacture money in the future.

The title says Future of Lifestyle Management. The preface suggests that the book "[is] about "the inner working of the transaction industry — the role of big business lobbies, vested interests, money, power..." The book has none of this drama. Rather, it's an intelligent and thoughtful compilation of trends in telecom, banking, and retail all of which have brought mobile money to an inflection point.

They have made an attempt to answer many of these questions, tracked various efforts to provide financial services on mobile phones, systematically reviewed the different industries that will influence as well as be impacted by this inevitable phenomenon, cited what we believe are the key factors that would enable large-scale adoption and, finally, presented some of our own hypotheses and predictions. We have also included a special chapter on India – 'The Power of a Billion Connected People' – to review the key stakeholders, the various innovative models that have been launched, and the impact mobile money will have on India – its demography, disparity, and development – moving forward. This book is our attempt to chronicle several trends and evaluate the implications of the inevitable march of mobile money.

CHAPTER 1

Unprecedented Connectedness

This chapter presents the introduction of mobile devices, their increasing usage, different application and a study on NTT DOCOMO Company.

CHAPTER 2

Evolution Of Telecom Companies

This chapter presents the history of communication, wireless networks, about GSM study, British telecom industry, their major players and the journey of telecom companies.

CHAPTER 3

Evolution Of Banks

This chapter presents the evolution of money and the role of money in people's lives. The increasing use of credit cards and adopting online payment methods.

CHAPTER 4

Evolution Of Merchants

This chapter presents merchandising has evolved beyond globalization and personalization. The evolution of Walmart and its business.

CHAPTER 5

The Leather Wallet

This chapter presents that the leather wallet is somehow changed into a digital wallet, about the mobile banking user interface.

CHAPTER 6

Early Experiments

This chapter presents the use of instruments like magnetic stripe cards.

CHAPTER 7

Smart Phone

This chapter presents the rise of browsers and the spreading of the internet in the early 1990s and increasing the use of smartphones.

CHAPTER 8

The Mobile Wallet

This chapter presents that mobile payments have increased the use of smartphones.

CHAPTER 9

Lifestyle: Pipe, Fund And Provider

This chapter presents the various lifestyle management services on mobile devices.

CHAPTER 10

The Future Of Money

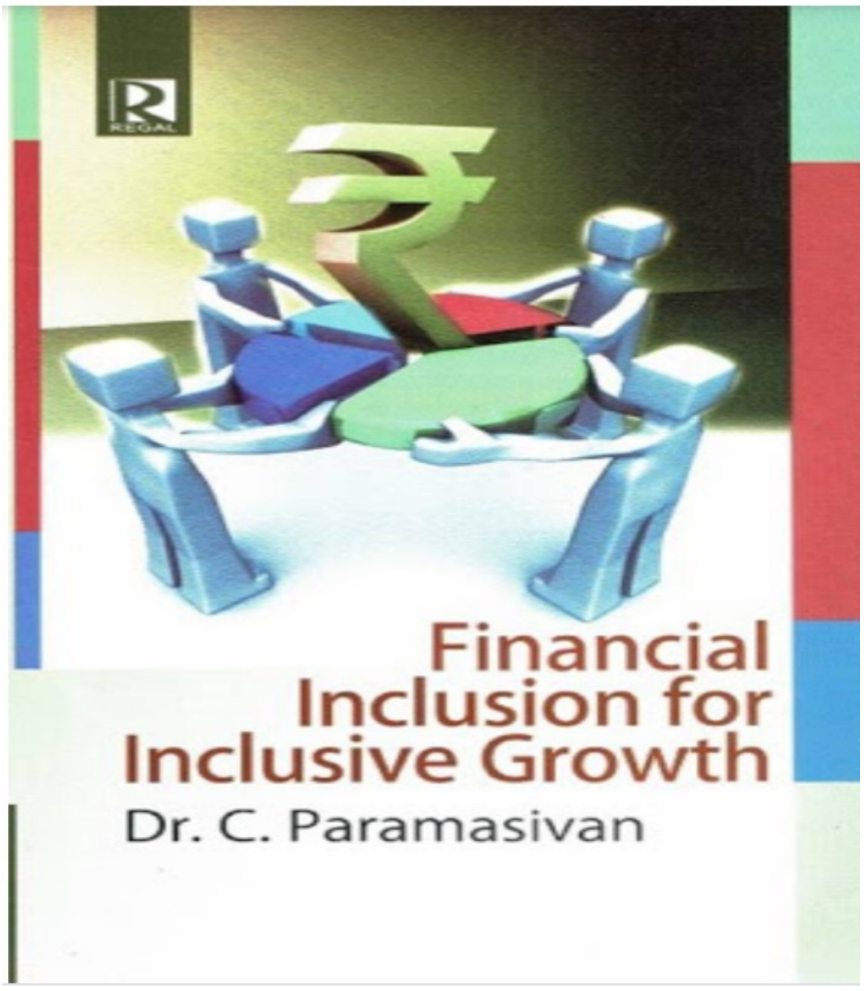
This chapter presents the impact of mobile money on stakeholders and people's life, mobile money is not the ultimate solution.

CHAPTER 11

India – The Power of A Billion Connected People

This chapter presents that mobile money can facilitate wealth creation and distribution.

BOOK REVIEW: 2



Book Review 2:

Name of the Book : Financial Inclusion For Inclusive Growth

Author : DR. C. PARAMASIVAN, P.h.D

Publisher : Regal Publications

Publish Year : 2016

ISBN : 9788184845129

Number of Pages : 304

The book under review is "**Financial Inclusion for Inclusive Growth**" authored by "DR. C. PARAMASIVAN, P.h.D", is an Assistant Professor in the PG and Research Department of Commerce, Periyar EVR College (Autonomous), Tiruchirappalli, Tamil Nadu. The book is being organized in 33 short chapters plus preface in the beginning, all of which have the first layout and then dissect the important issues.

The book has been written for general readers. So, as far as possible the use of the technical term has been avoided and efforts have been made to keep the discussion as simple as possible.

This book focuses on financial inclusion and its impact on inclusive growth in the country. This book would be beneficial to the academicians, research scholars and students to know the status of financial inclusion in the country and also will provide various suggestions to improve the present status of financial inclusion.

The content of the book is divided into three parts: -

PART- 1. An Overview Of Financial Inclusion

PART- 2. Financial Inclusion For Inclusive Growth

PART- 3. Financial Inclusion In Ethiopia

PART- 1

AN OVERVIEW OF FINANCIAL INCLUSION

Chapter-1

Financial Inclusion in India

The paper emphasizes the current status of financial in India and the world in general, highlight the measures taken by the government of India and RBIfor promoting financial and highlight the inter-linkages between socio-economic welfare and financial inclusion.

Chapter-2

A Historical Overview of Financial Inclusion in India

This chapter includes a history of financial inclusion, the present scenario of financial inclusion, strategies adopted for financial inclusion and a way of looking forward to financial inclusion.

Chapter-3

Financial inclusion: government promoted initiatives

This paper highlights several financial inclusion measures taken by the government of India and the RBI and outlines their efforts and achievements faced by each initiative.

Chapter-4

Government initiatives in financial inclusion

This chapter describes the access of weaker sections and vulnerable groups to financial services and various government initiatives and policies formulated to provide banking services at an affordable cost to low-income groups.

Chapter-5

Financial inclusion: a path through financial institutions

This chapter describes regulations and guidelines developed by policy-making and regulating institutions for strengthening financial inclusion.

Chapter-6

Financial inclusion in India: issues and challenges.

This chapter has made an attempt to study and analyze the issues and challenges of financial inclusion in India.

Chapter-7

Financial of banks in the rural sector in Kerala

This chapter defines financial inclusion as a process to ensure that viable financial services and products are provided to the weaker sections at prices that are affordable.

Chapter-8

Financial inclusion in urban areas: with special reference to Bhopal city

This chapter presents financial inclusion as extending the banking habit among the less privileged in urban and rural India.

Chapter-9

Role of RBI in Financial inclusion

This chapter describes that banks play a major role in expanding financial inclusion in a country.

Chapter-10

The financial inclusion banking sector

This chapter presents RBI plays an important role in expanding the banking network.

Chapter-11

Financial inclusion: an overview of maandeshi mahila sahakari bank, mashawad.

This chapter aims to study the financial performance inclusion of MMSB for women in maan tehsil.

Chapter-12

Role of RBI in financial inclusion

This chapter defines the role in RBI in financial inclusion, various steps are taken by RBI by support financial inclusion

Chapter-13

Financial inclusion-an unfinished agenda

This chapter describes that financial inclusion is the only solution to reach the base people and to overcome poverty.

PART- 2

FINANCIAL INCLUSION FOR INCLUSIVE GROWTH

Chapter-14

Financial inclusion-an attempt for inclusive development

This chapter defines that how financial inclusion covers the excluded population like NGO's self-help groups for their growths and explains their linkage with banks for greater financial inclusion.

Chapter-15

Financial inclusion for inclusive growth

This chapter attempts to examine the relevance of financial inclusion for the inclusive growth and identify the major issues and challenges of financial inclusion.

Chapter -16

Financial inclusion: illusion v. reality

This chapter provides an overview of various financial services whether included or excluded from financial inclusion in different economics.

Chapter – 17

Financial inclusion: role of Indian banks in reaching out to the unranked.

This chapter presents that financial inclusion is the delivery of financial services at affordable and low-income groups.

Chapter -18

Microfinance through commercial banks for inclusive growth

This chapter focuses on microfinance through the commercial bank for inclusive growth.

Chapter-19

Socio-economic development of women in the micro-credit process for self-help groups.

This chapter presents the analysis of data collected through a random sampling method through a questionnaire of about 300 respondents.

Chapter-20

Financial inclusion and its impact on debit entrepreneurs

This chapter shows the analysis of financial inclusion and its impact on Dalit entrepreneurs.

Chapter- 21

Changing functions and innovations in banking and financial services

This chapter includes the explanation of innovations in the banking sector, its scope, etc.

Chapter-22

Financial assistance to micro-enterprises for inclusive growth

This chapter discusses the financial assistance to micro-enterprises for inclusive growth.

Chapter -23

Financial inclusion and its impact on microfinance in India

This chapter highlights the financial inclusion and its impact on microfinance in India.

Chapter – 24

Financial literacy among the rural Indians

This chapter tries to evaluate the awareness levels of rural Indians with respect to key financial products, basic financial concepts. It also provides a comprehensive understanding of the financial literacy of rural Indians.

Chapter – 25

Inclusive growth through financial in India

This chapter discusses the inclusive growth through financial inclusion in India.

Chapter - 26

Financial inclusion and women empowerment

This chapter describes the UN department of economic and social affairs(DESA) and the UN capital development fund (UNCDF) and its initiatives were undertaken.

Chapter – 27

Role of banking institutions in financial inclusion

This chapter presents various efforts that are oriented towards mobilization of more savings, bank deposits, and current accounts.

PART – 3

FINANCIAL INCLUSION IN ETHIOPIA

Chapter – 28

Role of financial institutions for financial inclusion in Ethiopia.

This chapter shows that greater financial inclusion can bring an 'unbanked' population into the financial mainstream with positive effects on economic growth, financial stability and social cohesion.

Chapter -29

Financial inclusive growth in co-operation through the development of wastelands or drylands.

This chapter presents the status of wastelands/drylands and its financial inclusive growth and development through the basis of cooperative concepts in India.

Chapter – 30

Rural women's financial inclusion through land development in Ethiopia

This chapter focuses on rural women's financial development, land development, and economic stability through rural development and the cultivation of different major crops.

Chapter – 31

Financial of cooperative banking

This chapter narrates the problems forced by coffee cooperatives for obtaining credit from banking institutions.

Chapter- 32

An assessment on the role of village saving and loan associations in improving the socio-economic status of members in sheebedino woreda, in Sidama zone, SNNP region, Ethiopia

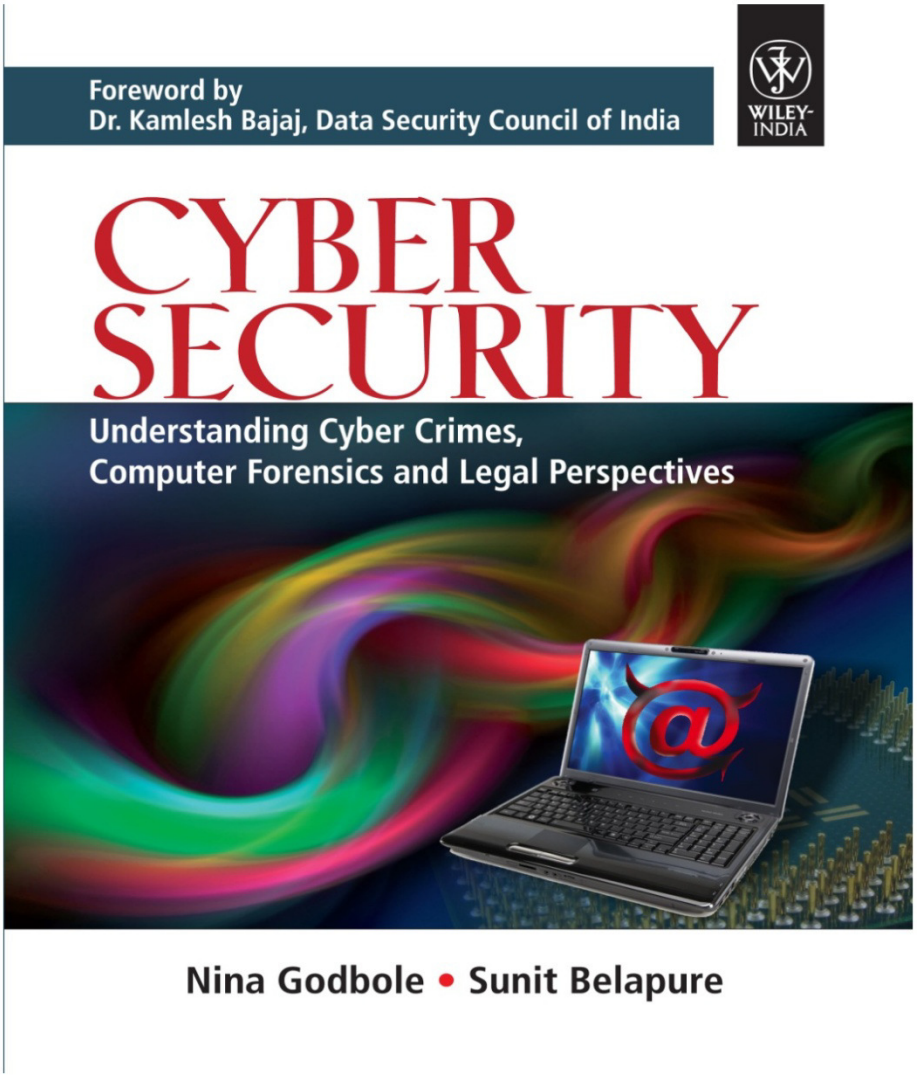
This chapter reveals that the VLSAs (village saving and loan associations) have a significant role in improving the social status of members than economic status.

Chapter- 33

Financial inclusion of women self-help growths through social capital

This chapter focuses on factors, which influence the level of social capital. it also includes data of random sampling procedure adopted to conduct a pre-tested interview schedule.

BOOK REVIEW: 3



Book Review 3:

Name of the Book	**:**	"CYBERSECURITY Understanding Cyber Crimes, Computer Forensics and Legal Perspectives"
Author	:	Nina Godbole and Sunit Belapure
Publisher	:	Wiley India Private Limited.
Published Year	:	2015
ISBN	:	978-81-265-2179-1
Number of Pages	:	636 pages

The book under review is: "CYBERSECURITY Understanding Cyber Crimes, Computer Forensics and Legal Perspectives"

The primary thesis of this book defines CYBER-SECURITY as a critical area and made the best attempt to maintain gender neutrality in the book. This book provides insights into new technologies such as the internet which have drastically changed our methods of communication. The internet provides us both speed and convenience to attract a critical mass of global users. We should be aware that internet transgressors also adopt the medium as a new avenue of crime. Cybercriminals consider SMBs as their easier targets because larger organizations have better off with security infrastructure. Irrespective of the size of the business, viruses, hacker intrusions, spyware, and spam can lead to lost or stolen data, computer downtime, decreased productivity, compliance issues, lost sales and even loss of reputation. Cybercriminals operate as a global gang and they do not care about organizational and national boundaries.

The book consists of a total of 12 chapters that present an introduction part on cybersecurity, cybercrime and advice on cybersecurity career and related certifications.

This book is designed with a broad audience in mind – individuals, who wish to take up cyber forensics as a career as well as those who want to seek careers in cybersecurity and managers from an organization who want to take cybersecurity seriously should also read this book. Keeping this intended audience in mind, the book is packed with adequate technical details as well as material with value to management.

CHAPTER 1

Introduction to Cybercrime

This chapter presents the introduction of cybercrime, its' importance, different types, the difference between cybercrime and cyber fraud, different types of cybercriminals an overview of cybercrime scenarios, to understand the legal perspective on cyber-crime.

CHAPTER 2

Cyber offenses: How criminals plan them

This chapter presents different types of cyberattacks, an overview of the steps involved in planning cybercrime, an overview of social engineering – what and how, the role of cybercafes in cybercrime, and an overview of cloud computing – what and how.

CHAPTER 3

Cybercrime: Mobile and wireless devices

This chapter presents the security challenges presented by mobile devices and faced by the mobile workforce and their implications, security issues arising due to the use of media players and daily uses of removable media in a mobile environment.

CHAPTER 4

Tools and methods used in cybercrime

This chapter presents proxy servers and anonymizers, about password cracking key loggers, spyware, viruses, worms, Trojan horses and backdoors DoS and DDoS attacks, SQL injections and wireless network hacking.

CHAPTER 5

Phishing and identity theft

This chapter presents that what is phishing, different methods of phishing, whaling, what is identity theft, myths and facts about identity theft, its' different types and different techniques and countermeasures.

CHAPTER 6

Cybercrime and cybersecurity: The legal perspectives

This chapter presents the need for cyber laws an overview of European Union (EU) legal framework, strengths and weaknesses of the Indian IT Act along with the amendment to the Act, meaning of digital signature, an overview of challenges faced in punishing the cybercriminals.

CHAPTER 7

Understanding Computer Forensics

This chapter describes the fundamental concepts in cyber forensics and its' meaning, an overview of cardinal rules of computer forensics, its' legal requirements, the meaning of forensic auditing and challenges faced in cyber- forensics.

CHAPTER 8

Forensics of hand-held devices

This chapter presents the different types of hand-held devices, an overview of cell phone characteristics, the forensics aspects of iPhone, iPod, BlackBerry device, printers, scanners and digital cameras and challenges for law authorities.

CHAPTER 9

Cybersecurity: Organizational implications

This chapter presents the top web threats faced by organizations, the meaning of social computing, intellectual property rights (IPR), cloud computing, the importance of forensics readiness, explanation of endpoint security and importance of incident management systems.

CHAPTER 10

Cybercrime and cyberterrorism: Social, Political, Ethical and Psychological Dimensions

This chapter presents the introduction of Intellectual Property in the cyberspace, ethical dimension of cybercrimes, mindsets of hackers and information warfare.

CHAPTER 11

Cybercrime: Illustrations, examples and mini- cases

This chapter presents the various examples, mini-cases held and various illustrations on cybersecurity frauds and online scams.

CHAPTER 12

Careers in cybersecurity

This chapter presents the various career paths in cybersecurity, IT organization and cybersecurity certifications.

OBJECTIVES OF THE STUDY

- To determine the awareness of cybersecurity in the Digital payment system.
- To identify the security issues faced by users of digital payment methods.
- To examine the consumer's attitude towards digital payments.
- To explore and understand the policy initiatives for cybersecurity in India.
- To study the impact of cybersecurity in effective implementation of financial inclusion.
- To provide suggestions regarding security measures in the usage of digital payments.

RESEARCH QUESTION

- What are the requirements of consumers regarding the adoption of digital payment methods in terms of security?
- What are the various security issues faced by consumers in using digital payments?
- What are the various policy initiatives taken by the Reserve Bank of India?
- What are the effects of security aspects on the usage of digital payments?
- What are the various security measures which can be adopted at the time of usage of digital payment methods?

PERIOD OF THE STUDY

- The present study covers a period of 4 years from 2016-17 to 2019-20.

RESEARCH METHODOLOGY

The research design for this study is a cross-sectional survey. The targeted population (Respondents) in this study includes both urban and rural population classified in three categories:-

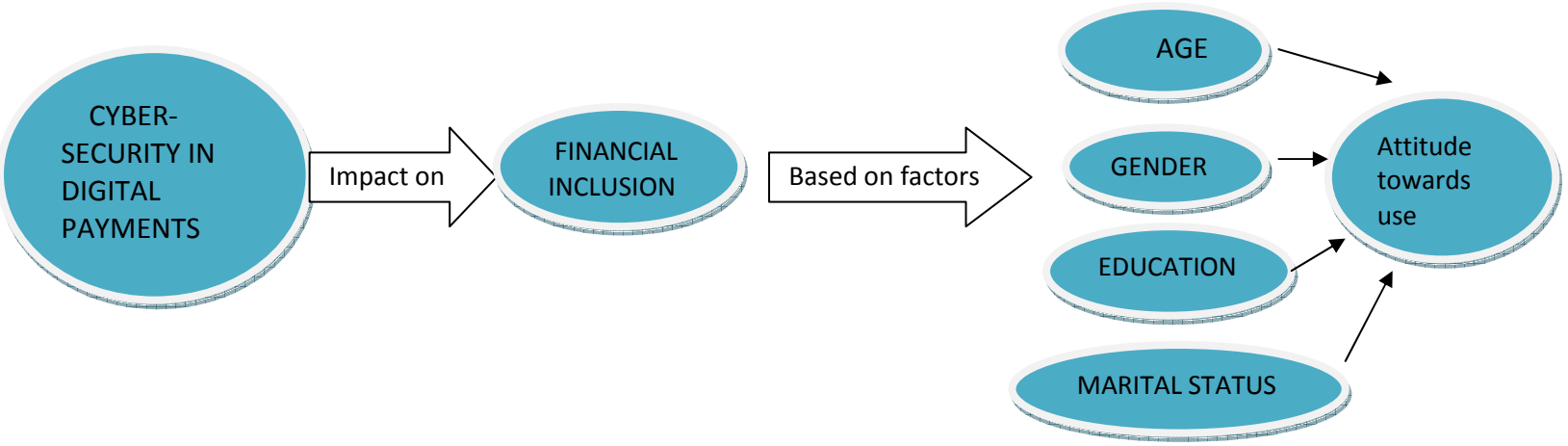
- Generation-X = 40-54 years of age
- Generation-Y = 25-39 years of age
- Generation-Z = 4-24 years of age

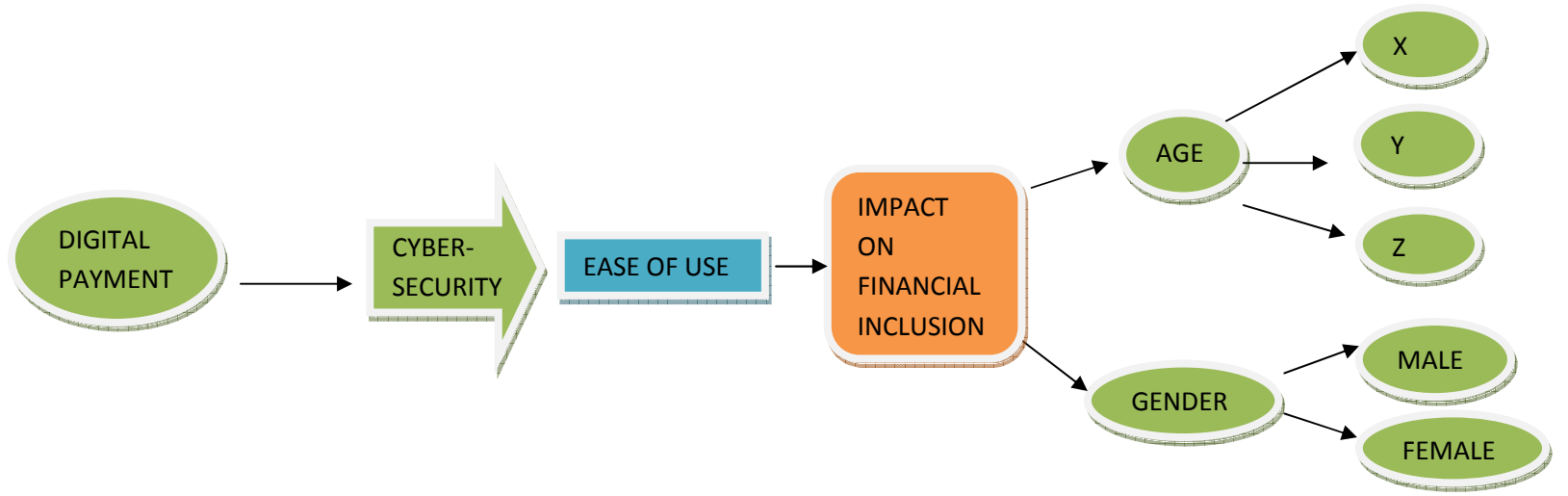
The study identifies various factors for determining the effect of cybersecurity based on digital payments on financial inclusion. The following variables are as follows:-

DEPENDENT VARIABLES	INDEPENDENT VARIABLES
CYBER-SECURITY	AGE
FINANCIAL INCLUSION	GENDER
DIGITAL PAYMENT	EDUCATION
	MARITAL STATUS

This study makes an attempt to identify the effect of cyber-security on financial inclusion in association with age and gender.

RESEARCH FRAMEWORK:-





HYPOTHESIS OF THE STUDY

A hypothesis usually refers to a tentative prediction or an assumption about the characteristics of a population. It is generally a proposed explanation for a particular phenomenon. It may be proven correct or wrong but it must be capable enough to refute. It gives directions to the researcher to answer the research questions. The hypothesis is a conceptual framework that is derived from the research problem, literature review and objectives of the study. It also states the explanation of the relationship between two or more variables. For the present

study, the researcher has formulated the null hypothesis. The hypotheses are as under:

NULL HYPOTHESIS (H0):

H01: There is no significant difference between the awareness of cyber-security in generation-X, Y AND Z.

H02: There is no significant difference between the awareness about cyber-security in male and female category.

H03: There is no significant difference between the awareness about cyber-security in urban and rural areas.

H04: Cyber-security has no significant impact of digital payments on Financial Inclusion.

RESEARCH DESIGN

The research design refers to a framework of methods and techniques chosen by a researcher to handle a particular research problem efficiently. It is a blueprint for collecting and analyzing the data. It directs the researchers in which direction the research needs to be progressed.

Empirical Research

This refers to a research method that is used to collect data from empirical (Primary) sources. It provides answers to the specific research questions, by quantifying the evidence and makes sense of it in qualitative form.

Exploratory Research

This refers to a research method that investigates a problem that is not being clearly defined. It gives us a better understanding of an existing problem.

SAMPLE DESIGN

Sample Design is defined as a technique used to select the sampling units for measurement. It also defines the population, area of the survey, sampling size and type.

Type of data: Primary data
Method: Structured Questionnaire/ Schedule/ Interview
Sample: Urban and Rural Areas
Sample design: Stratified sampling

- According to Age :

1. Generation-X = 40-54 years of age
2. Generation-Y = 25-39 years of age
3. Generation-Z = 4-24 years of age

- According to Gender :

1. Male
2. Female

- According to Area :

1. Urban
2. Rural

Sample Size: 500 respondents (Urban – 250 Samples & Rural – 250 Samples)

SAMPLE AREA : JAIPUR DISTRICT	DIVISION	NO. OF RESPONDENTS ON THE BASIS OF AREA	NO. OF RESPONDENTS ON THE BASIS OF GENDER	NO. OF RESPONDENTS ON THE BASIS OF AGE
STRATA 1	URBAN	250	MALE : 125 ; FEMALE : 125	GEN X : 85 GEN Y : 85 GEN Z : 80
STRATA 2	RURAL	250	MALE : 125 ; FEMALE : 125	GEN X : 85 GEN Y : 85 GEN Z : 80

Scope of the Study : A comparative study of Jaipur (Rajasthan) and Kanpur (Uttar Pradesh)

DATA COLLECTION

Data Collection refers to a process of gathering information and facts from the relevant sources which are used by the researcher in the research process. The kind of data collection method is very important for the whole research process. There are two basic means of data collection, which are as follows:-

a) Primary Data
b) Secondary Data

Primary data has been collected through surveys, interviews, and questionnaires. Secondary data is has been collected from different government websites, RBI, various published reports, as well as from books and national journals.
This research is based on the primary source of data collection. With respect to support the information reference, primary data will be collected through a questionnaire.

TOOLS & TECHNIQUES FOR ANALYSIS

Statistical Techniques: These are the techniques used in the statistical analysis of raw research data.

- Chi-Square
- Regression
- Anova

LIMITATIONS OF THE STUDY

- This study is based on Primary Data.
- Primary sources of data have their' own limitations.
- Cyber security is very wide concept and it cannot be studied in a single study.
- Sample selected may not respond to the questionnaire.

CHAPTERISATION

Chapter: 1 Introduction

- Introduction
- Globalisation and Revolution in Information communication technology
- Internet and its uses
- Cyber security scenario in India
- Financial Inclusion in India

Chapter: 2 Review of the Literature

- Review Paper
- Review Book
- Research Gap

Chapter: 3 Research Methodology

- Research : An Overview
- Review of Literature
- Research Gap
- Justifications and relevance of the Study
- Statement of the problem
- Scope of the Study
- Objectives of the Study
- Hypotheses of the Study
- Tools for Hypothesis testing
- Sources and methods of data collections
- Sample Design
- Data analysis and Interpretations
- Limitation of the Study

Chapter: 4 Concepts of Financial Inclusion

- Meaning of Financial Inclusion
- Reserve Bank of India (RBI)'s Initiatives
- Demonetisation
- Online Banking
- Digital payment system in India
- Financial Exclusion and its consequences

Chapter: 5 Concepts of Cyber Security

- Meaning of Cyber security
- Cyber Crime
- Cyber Laws
- Cyber security in Digital Payment System
- Factors on which Cyber Security depends
- Issues and challenges related to Cyber Security

Chapter: 6 Data Analysis and Interpretations

- Introduction
- Pilot Survey
- Tools for Data Analysis
- Tools for Hypothesis Testing
- Data Analysis and Interpretations

Chapter: 7 Conclusion

- Key Findings
- Summary of Hypothesis Testing
- Suggestions
- Limitations of the Study
- Scope for further research

APPENDICES :

- A1 : Structured Questionnaire/ Schedule/ Interview
- A2 : List of Research Papers Communicated/accepted/published/presented
- A3 : Copy of the manuscripts/ reprints of the papers communicated/ accepted/ published
- A4 : Department of Information Technology – National Cyber Security policy
- B : Personal Profile of the Researcher

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